A 57.46/3:996/5

Natural
Resources
Conservation
Service

Montana
Basin Outlook Report
May 1, 1996

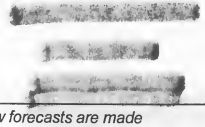
OCT 27 200
PLEASE RE

Montana State Library
3 0864 1004 8663 1

Basin Outlook Reports
and
Federal - State - Private
Cooperative Snow Surveys

For more water supply and resource management information, contact:

See Attached List



How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Natural Resources Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-2791.

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C., 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

United States Department of Agriculture
Natural Resources Conservation Service (formerly the Soil Conservation Service)
Bozeman, Montana

Where to Get More Information

Beaverhead County
Victor Hager
683-4963

Big Horn County
Dicksie Michael
665-3777

Blaine County
Matthew Crampton
357-2310

Broadwater County
Kelly Morris
266-3146

Carbon County
Gregory Evertz
962-3641

Carter County
Wayne Yost
775-6355

Cascade County
Danny Burgett
727-3603

Choteau County
Dale Krause
622-5627

Custer County
Roger Goff
232-2439

Daniels County
Stanley French
487-2872

Dawson County
Michael Carlson
365-5565

Deer Lodge County
Glen Green
846-1703

Fallon County
Rick Caquelin
778-2217

Fergus County
Theodore Hawn
538-7401

Flathead County
Mary Pochelon
752-4242

Gallatin County
Gordon Hill
587-6929

Garfield County
Clarence Clayton
557-2232

Glacier County
Bonnie Thies
873-4292

Golden Valley County
John Rouane Jr.
323-2103

Granite County
Matthew Crampton
859-3291

Hill County
Karen Hoffman
265-6252

Jefferson County
Ron Hoagland
287-3215

Judith Basin County
Larry Zarecor
566-2311

Lake County
David Wolf
883-5875

Lewis and Clark County
Nancy Basting
449-5278

Liberty County
Eileen Eide
759-5778

Lincoln County
Angel Rosario
296-2233

Madison County
Mike Barron
842-5741

McCone County
Rusty Irions
485-2660

Meagher County
Otto Ohlson
547-3633

Mineral County
John Blaine
251-4826

Missoula County
John Blaine
251-4826

Musselshell County
John Rouane Jr.
323-2103

Park County
Geri Sullivan
222-2899

Petroleum County
Theodore Hawn
538-7401

Phillips County
Patty Creamer
654-1334

(over)

Pondera County
Phyllis Philipps
278-3922

Powder River County
Carol Hilliard
436-2417

Powell County
Glen Green
846-1703

Prairie County
Mark Parman
637-5381

Ravalli County
Keith Robertson
363-5010

Richland County
Kim Whipple
482-2110

Roosevelt County
Richard Iversen
787-5232

Rosebud County
Stewart Greer
342-5466

Sanders County
Stuart Lomax
826-3701

Sheridan County
Monica Friedrich
765-1801

Silver Bow County
Ron Hoagland
287-3215

Stillwater County
Philip Sandoval
322-5359

Sweet Grass County
Dan Glasgow
932-5160

Teton County
Kaycee Ferster
466-5722

Toole County
David Pratt
434-5835

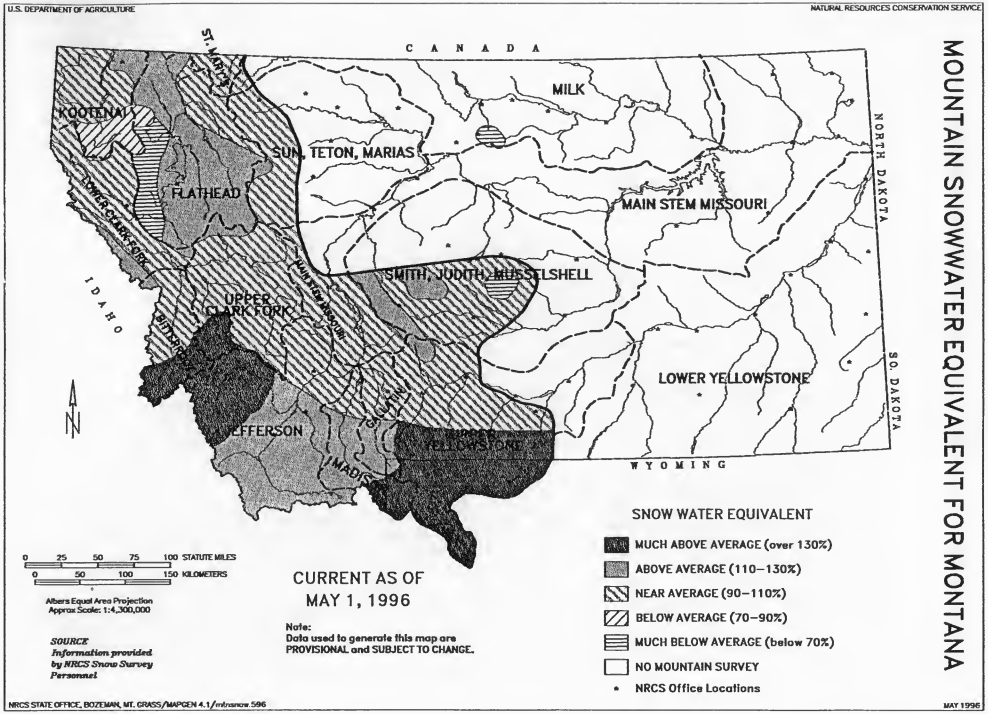
Treasure County
Stewart Greer
342-5466

Valley County
Lanny Walker
228-4324

Wheatland County
John Oiestad
632-5534

Wibaux County
Rick Caquelin
778-2217

Yellowstone County
Harold Cottet Jr.
657-6527


U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
MOUNTAIN SNOWWATER EQUIVALENT FOR MONTANA
CANADA
ST. MARY'S
KOOTENAI
FLATHEAD
SUN, TETON, MARIAS
MILK
NORTH DAKOTA
MAIN STEM MISSOURI
TOWNSEND
CLARK FORK
IDAHO
BITTERROOT
UPPER CLARK FORK
SMITH, JUDITH, MUSSELSHELL
LOWER YELLOWSTONE
SO. DAKOTA
JEFFERSON
MADISON
UPPER YELLOWSTONE
WYOMING
N
0 25 50 75 100 STATUTE MILES
0 50 100 150 KILOMETERS
Albers Equal Area Projection
Approx Scale: 1:4,300,000
SOURCE
Information provided by NRCS Snow Survey Personnel
CURRENT AS OF MAY 1, 1996
Note:
Data used to generate this map are PROVISIONAL and SUBJECT TO CHANGE.
SNOW WATER EQUIVALENT
MUCH ABOVE AVERAGE (over 130%)
ABOVE AVERAGE (110–130%)
NEAR AVERAGE (90–110%)
BELOW AVERAGE (70–90%)
MUCH BELOW AVERAGE (below 70%)
NO MOUNTAIN SURVEY
NRCS Office Locations
NRCS STATE OFFICE, BOZEMAN, MT. GRASS/MAPGEN 4.1/mtnsnow.596
MAY 1996

U.S. DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE

STREAM FLOW PROSPECTS FOR MONTANA

Spring and Summer Period

CURRENT AS OF
MAY 1, 1996

Note:
Data used to generate this map are PROVISIONAL and SUBJECT TO CHANGE. There are no areas designated as Much Below Average in the May 1 report.

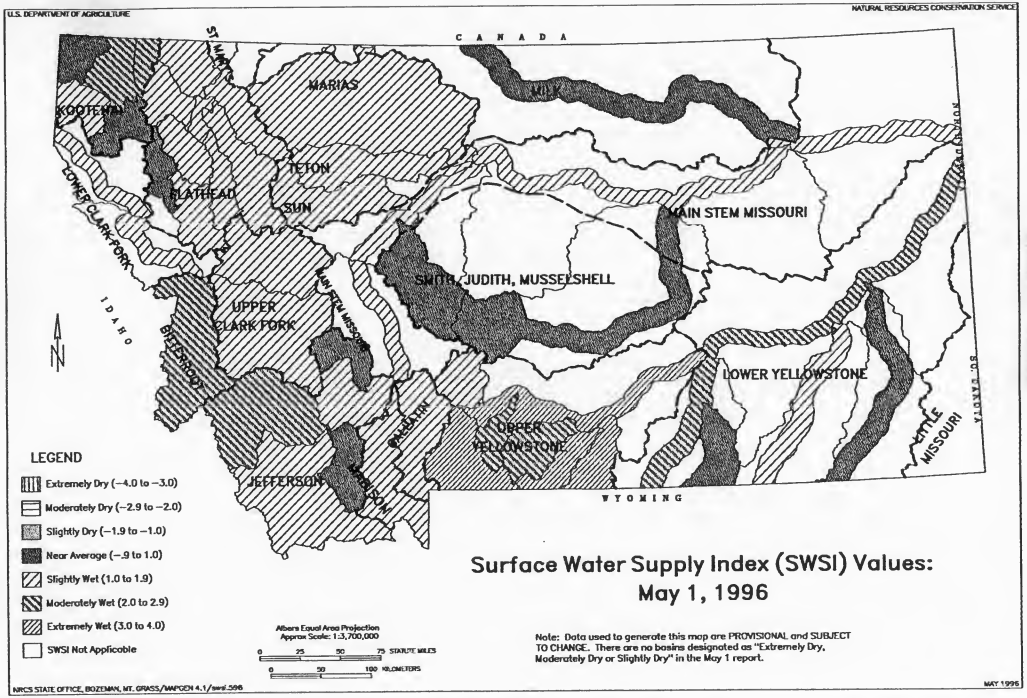
SOURCE
Information provided by NRCS Snow Survey Personnel

STREAM FLOW PROSPECTS

- MUCH ABOVE AVERAGE (over 130%)
- ABOVE AVERAGE (110–130%)
- NEAR AVERAGE (90–110%)
- BELOW AVERAGE (70–90%)
- MUCH BELOW AVERAGE (below 70%)
- NOT FORECAST
- NRCS Office Locations

NRCS STATE OFFICE, BOZEMAN, MT. GRASS/MAPGEN 4.1/stsflow.596

MAY 1996


U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
CANADA
ST MARY
MARIAS
MILK
KOOTENAI
TETON
LOWER CLARK FORK
FLATHEAD
SUN
MAIN STEM MISSOURI
SMITH, JUDITH, MUSSELSHELL
UPPER CLARK FORK
IDAHO
BITTERROOT
MADISON
GALLATIN
LOWER YELLOWSTONE
UPPER YELLOWSTONE
JEFFERSON
BIG HORN
LITTLE MISSOURI
WYOMING
LEGEND
Extremely Dry (−4.0 to −3.0)
Moderately Dry (−2.9 to −2.0)
Slightly Dry (−1.9 to −1.0)
Near Average (−.9 to 1.0)
Slightly Wet (1.0 to 1.9)
Moderately Wet (2.0 to 2.9)
Extremely Wet (3.0 to 4.0)
SWSI Not Applicable
Albers Equal Area Projection
Approx Scale: 1:3,700,000
0 25 50 75 STATUTE MILES
0 50 100 KILOMETERS
Surface Water Supply Index (SWSI) Values:
May 1, 1996
Note: Data used to generate this map are PROVISIONAL and SUBJECT TO CHANGE. There are no basins designated as "Extremely Dry, Moderately Dry or Slightly Dry" in the May 1 report.
NRCS STATE OFFICE, BOZEMAN, MT. GRASS/WAPGEN 4.1/swsi.596
MAY 1996

SNOW COURSE DATA
AND BASIN SNOWPACK SUMMARY

MAY 1996

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
KOOTENAI in CANADA		1				
ALLISON PASS CAN.	6490	4/30/96	63	23.9	17.9	18.4
FERNIE EAST(NEW) CAN.	4100	5/02/96	12	3.9	5.4	10.1
FIELD CAN.	4200	5/01/96	4	1.1	.9	1.3
FLOE LAKE CAN.	6860	5/06/96	104	42.3	35.5	32.0
GLACIER CAN.	4100	4/28/96	66	31.2	22.3	28.7
GRAY CK UPPER CAN.	6270	4/30/96	89	36.0	32.0	34.8
GRAY CK. LOWER CAN.	5100	4/30/96	46	17.0	19.2	19.4
HIGHWOOD SUMMIT CAN.	7250	4/30/96	66	21.4	19.5	18.1
KICKING HORSE CAN.	5400	5/01/96	37	14.1	13.9	13.0
KIMBERLEY MID. CAN.	5510	4/30/96	30	10.4	8.2	10.6
LOST CREEK CAN.		4/30/96	71	26.3	24.7	23.1
LOWER KIMBERELY CAN.	4500	4/30/96	0	.0	.0	1.3
MARBLE CANYON CAN.	4990	4/26/96	42	17.4	13.7	12.0
MIST CREEK CAN.	5740	4/30/96	19	6.5	8.8	6.5
MOUNT JOFFRE CAN.	5740	5/06/96	61	21.4	16.4	15.6
MOYIE MTN CAN.	6400	4/28/96	46	18.1	13.4	19.3
MUD LAKE CAN.	6200	4/30/96	41	14.3	16.9	13.7
MT ASSINIBOINE CAN.	7320	5/06/96	80	30.3	25.9	23.1
SINCLAIR PASS CAN.	4500	4/25/96	10	3.1	2.0	2.7
SULLIVAN MINE CAN.	5090	5/01/96	35	13.5	9.8	11.4
SUNSHINE PILLOW CAN.	7300	5/01/96	---	30.0	25.4	22.8
TENT RIDGE CAN.		4/30/96	54	19.8	17.8	15.2
THREE ISLE LAKE CAN.	7090	4/30/96	91	37.3	25.9	25.6
THUNDER CREEK CAN.	6600	5/06/96	49	14.3	13.5	12.7
UPPER KIMBERLEY CAN.	7020	4/30/96	69	30.0	21.2	22.1
TOTAL -- 25 COURSES					118%	117%
			(SWE,IN=	483.6	410.2	413.5)
KOOTENAI MAINSTEM		2				
BANFIELD MTN PILLOW	5600	5/01/96	---	19.4	17.5	18.3
BEAR MOUNTAIN PILLOW	5400	5/01/96	---	53.9	59.4	61.0
RED MOUNTAIN	6000	4/29/96	49	20.7	17.8	17.5
TOTAL -- 3 COURSES					99%	97%
			(SWE,IN=	94.0	94.7	96.8)
TOBACCO		3				
GRAVE CRK PILLOW	4300	5/01/96	---	8.5	4.3	9.0
STAHL PEAK PILLOW	6030	5/01/96	---	54.8	43.4	36.5
WEASEL DIVIDE	5450	5/01/96	---	39.6E	36.9	33.6
TOTAL -- 3 COURSES					122%	130%
			(SWE,IN=	102.9	84.6	79.1)
FISHER		4				
ABE LINCOLN	4440	4/25/96	26	10.5	---	---
BAREE CREEK	5500	4/29/96	82	37.2	38.1	43.0
BAREE MIDWAY	4600	4/29/96	59	23.4	27.2	29.4
BAREE TRAIL	3800	4/29/96	0	.0	.0	1.3
BRUSH CREEK TIMBER	5000	5/01/96	5	1.3E	.4	6.0
HAND CREEK PILLOW	5030	5/01/96	---	6.1	3.5	8.3
TOTAL -- 5 COURSES					98%	77%
			(SWE,IN=	68.0	69.2	88.0)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
YAAK		5				
DAVIS CREEK	5400	4/30/96	21	7.7	21.2	21.5
GARVER CREEK	4250	4/26/96	18	6.7	3.2	4.0
FOURTH OF JULY	3450	4/25/96	0	.0	.0	1.0
HAWKINS LAKE PILLOW	6450	5/01/96	---	28.0	26.6	30.4
NEWTON MOUNTAIN	5600	4/25/96	72	33.7	35.2	35.4
RED MOUNTAIN	6000	4/29/96	49	20.7	17.8	17.5
RED TOP	5260	4/25/96	63	28.4	25.5	28.8
TOTAL -- 7 COURSES					97%	90%
			(SWE,IN=	125.2	129.5	138.6)
KOOTENAI in MONTANA		6=2+3+4+5				
TOTAL -- 17 COURSES					103%	96%
			(SWE,IN=	369.4	360.2	385.0)
KOOTENAI above BONNERS FERRY, ID		7=1+6				
TOTAL -- 42 COURSES					111%	107%
			(SWE,IN=	853.0	770.4	798.5)
NORTH FORK FLATHEAD in CANADA		8				
AKAMINA CAN.	5810	4/30/96	50	20.0	20.5	18.1
FERNIE EAST(NEW)CAN.	4100	5/02/96	12	3.9	5.4	10.1
GARDINER HEAD. CAN.		4/30/96	76	32.3	34.6	29.8
MORRISSEY RIDGE CAN.	6100	5/01/96	---	36.7	29.4	28.7
W.CASTLE (BUSH) CAN.	4990	4/30/96	23	9.4	6.3	9.0
TOTAL -- 5 COURSES					106%	107%
			(SWE,IN=	102.3	96.2	95.7)
NORTH FORK FLATHEAD in MONTANA		8A				
FLATTOP MTN PILLOW	6300	5/01/96	---	58.5	49.7	48.4
GRAVE CRK PILLOW	4300	5/01/96	---	8.5	4.3	9.0
HELL ROARING DIVIDE	5770	5/01/96	84	35.9	30.5	30.1
HERRIG JUNCTION	4850	4/26/96	69	28.7	25.4	23.2
MANY GLACIER PILLOW	4900	5/01/96	---	2.3	.0	8.0
MINERAL CREEK	4000	4/29/96	28	12.0	3.4	11.2
STAHL PEAK PILLOW	6030	5/01/96	---	54.8	43.4	36.5
WEASEL DIVIDE	5450	5/01/96	---	39.6E	36.9	33.6
TOTAL -- 8 COURSES					124%	120%
			(SWE,IN=	240.3	193.6	200.0)
MIDDLE FORK FLATHEAD		9				
BADGER PASS PILLOW	6900	5/01/96	---	41.0	34.8	37.8
EMERY CREEK PILLOW	4350	5/01/96	---	5.9	4.3	8.5
FLATTOP MTN PILLOW	6300	5/01/96	---	58.5	49.7	48.4
MARIAS PASS	5250	4/29/96	37	14.5	5.2	14.4
PIKE CREEK PILLOW	5930	5/01/96	---	29.8	20.3	27.8
TOTAL -- 5 COURSES					131%	109%
			(SWE,IN=	149.7	114.3	136.9)
SOUTH FORK FLATHEAD		10				
EMERY CREEK PILLOW	4350	5/01/96	---	5.9	4.3	8.5
HOLBROOK	4530	5/01/96	---	3.0E	.0	1.7
NOISY BASIN PILLOW	6040	5/01/96	---	48.6	46.3	44.0
SPOTTED BEAR MTN.	7000	5/01/96	---	11.4E	.0	9.6
TRINKUS LAKE	6100	5/01/96	---	47.8E	38.2	43.1
TWIN CREEKS	3580	5/01/96	---	1.0E	.0	1.8
UPPER HOLLAND LAKE	6200	5/01/96	---	37.0E	28.0	35.2
TOTAL -- 7 COURSES					132%	108%
			(SWE,IN=	154.7	116.8	143.9)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
STILLWATER-WHITEFISH		11				
ASHLEY DIVIDE	4820	4/30/96	1	.3	.0	1.0
ASHLEY LAKE	4000	4/30/96	1	.3	.0	1.2
BRUSH CREEK TIMBER	5000	5/01/96	5	1.3E	.4	6.0
CHICKEN CREEK	4060	4/26/96	23	8.4	7.1	3.6
GRIFFIN CR DIVIDE	5150	4/26/96	12	4.2	3.5	6.3
HAND CREEK PILLOW	5030	5/01/96	---	6.1	3.5	8.3
HELL ROARING DIVIDE	5770	5/01/96	84	35.9	30.5	30.1
HERRIG JUNCTION	4850	4/26/96	69	28.7	25.4	23.2
LOGAN CREEK	4300	5/01/96	8	1.7E	.2	2.2
STRYKER BASIN	6180	4/26/96	103	44.4	37.0	35.8
TOTAL -- 10 COURSES					122%	112%
			(SWE,IN=	131.3	107.6	117.7)
SWAN		12				
BIG CREEK	6750	4/30/96	122	51.7	48.6	49.8
FATTY CREEK	5500	4/30/96	60	21.7	23.2	23.6
KRAFT CREEK PILLOW	4750	5/01/96	---	7.9	.0	5.8
MOSS PEAK PILLOW	6780	5/01/96	---	51.5	47.9	41.8
NOISY BASIN PILLOW	6040	5/01/96	---	48.6	46.3	44.0
NF JOCKO PILLOW	6330	5/01/96	---	55.2	31.0	48.3
TRINKUS LAKE	6100	5/01/96	---	47.8E	38.2	43.1
UPPER HOLLAND LAKE	6200	5/01/96	---	37.0E	28.0	35.2
TOTAL -- 8 COURSES					122%	110%
			(SWE,IN=	321.4	263.2	291.6)
MISSION VALLEY		13				
BIG CREEK	6750	4/30/96	122	51.7	48.6	49.8
BISSON CREEK PILLOW	4920	5/01/96	---	5.5	4.0	2.5
BLACKTAIL	5650	4/27/96	28	10.0	7.8	7.0
FATTY CREEK	5500	4/30/96	60	21.7	23.2	23.6
MOSS PEAK PILLOW	6780	5/01/96	---	51.5	47.9	41.8
TOTAL -- 5 COURSES					107%	113%
			(SWE,IN=	140.4	131.5	124.7)
LITTLE BITTERROOT-ASHLEY		14				
ASHLEY DIVIDE	4820	4/30/96	1	.3	.0	1.0
ASHLEY LAKE	4000	4/30/96	1	.3	.0	1.2
BASSOO PEAK	5150	4/26/96	6	2.2	.0	5.7
BLACKTAIL	5650	4/27/96	28	10.0	7.8	7.0
GRIFFIN CR DIVIDE	5150	4/26/96	12	4.2	3.5	6.3
TRUMAN CREEK	4060	4/30/96	0	.0	.0	.6
TOTAL -- 6 COURSES					150%	78%
			(SWE,IN=	17.0	11.3	21.8)
JOCKO		15				
NF JOCKO PILLOW	6330	5/01/96	---	55.2	31.0	48.3
REVAIS CREEK	4800	4/30/96	0	.0	.0	.0
SQUAW PEAK PILLOW	6150	5/01/96	---	16.6	11.3	14.9
STUART MOUNTAIN PILL	7400	5/01/96	---	40.4	27.5	---
STUART MOUNTAIN	7400	4/30/96	95	41.0	28.5	32.3
TV MOUNTAIN	6800	4/30/96	55	21.0	15.6	18.7
TOTAL -- 5 COURSES					155%	117%
			(SWE,IN=	133.8	86.4	114.2)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
FLATHEAD in MONTANA		9A=8A+9+10+11+12+13+14+15				
TOTAL -- 39 COURSES					130%	112%
			(SWE,IN=	831.3	640.3	739.3)
FLATHEAD RIVER BASIN		16=8+9A				
TOTAL -- 44 COURSES					127%	112%
			(SWE,IN=	933.6	736.5	835.0)
CLARK FORK above FLINT CREEK		17				
BARKER LAKES PILLOW	8250	5/01/96	---	18.4	20.9	16.0
BASIN CREEK PILLOW	7180	5/01/96	---	9.8	15.8	10.0
BLACK MOUNTAIN	7750	4/25/96	48	15.9	19.0	17.8
BULL MOUNTAIN	6600	4/26/96	10	4.4	.0	3.1
COTTONWOOD CREEK	6400	4/25/96	14	3.6	11.8	7.6
DIX HILL	6400	4/27/96	10	3.3	.0	4.4
GOLD CREEK LAKE	7200	4/30/96	62	24.4	---	---
NEVADA CREEK PILLOW	6480	5/01/96	---	18.1	14.2	12.5
NEVADA RIDGE PILLOW	7020	5/01/96	---	20.2	12.3	---
OPHIR PARK	7150	4/27/96	50	18.0	14.4	17.4
ROCKER PEAK PILLOW	8000	5/01/96	---	18.0	19.0	17.7
TEN MILE LOWER	6600	4/26/96	7	2.0	5.6	5.4
TEN MILE MIDDLE	6800	4/26/96	36	10.8	12.8	12.4
WARM SPRINGS PILLOW	7800	5/01/96	---	34.7	24.4	24.9
TOTAL -- 12 COURSES					99%	105%
			(SWE,IN=	157.0	157.9	149.2)
FLINT CREEK		18				
BLACK PINE PILLOW	7100	5/01/96	---	16.8	11.9	12.0
COMBINATION PILLOW	5600	5/01/96	---	.0	.3	3.2
DISCOVERY BASIN	7050	4/30/96	38	12.9	11.8	10.0
INTERGAARD	6450	4/30/96	18	6.0	7.0	7.2
PETERSON MEADOWS	7200	4/30/96	32	11.0	12.9	11.0
STORM LAKE	7780	4/30/96	50	16.7	16.2	15.0
TOTAL -- 6 COURSES					105%	109%
			(SWE,IN=	63.4	60.1	58.4)
ROCK CREEK		19				
AMBROSE	6480	4/29/96	36	12.3	9.9	12.1
PETERSON MEADOWS	7200	4/30/96	32	11.0	12.9	11.0
SKALKAHO PILLOW	7260	5/01/96	---	36.0	24.9	26.2
SLIDE ROCK MOUNTAIN	7100	4/29/96	51	16.3	12.9	17.2
STORM LAKE	7780	4/30/96	50	16.7	16.2	15.0
TOTAL -- 5 COURSES					120%	113%
			(SWE,IN=	92.3	76.8	81.5)
CLARK FORK above BLACKFOOT		20=17+18+19				
TOTAL -- 20 COURSES					108%	109%
			(SWE,IN=	267.0	246.7	245.4)
BLACKFOOT		21				
COPPER BOTTOM PILLOW	5200	5/01/96	---	8.5	.0	8.1
COPPER CAMP PILLOW	6950	5/01/96	---	43.0	25.7	35.3
COYOTE HILL	4200	4/26/96	12	3.9	.0	3.0
DIX HILL	6400	4/27/96	10	3.3	.0	4.4
LUBRECHT PILLOW	4680	5/01/96	---	.0	.0	1.7
LUBRECHT FOREST NO 3	5450	5/01/96	1	.3	.0	3.0

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
LUBRECHT FOREST NO 4	4650	5/01/96	0	.0	.0	.2
LUBRECHT FOREST NO 6	4040	5/01/96	0	.0	.0	.1
LUBRECHT HYDROPLOT	4200	5/01/96	0	.0	.0	.1
N.F. ELK CR PILLOW	6250	5/01/96	---	11.0	9.2	9.6
NEVADA CREEK PILLOW	6480	5/01/96	---	18.1	14.2	12.5
NEVADA RIDGE PILLOW	7020	5/01/96	---	20.2	12.3	---
NF JOCKO PILLOW	6330	5/01/96	---	55.2	31.0	48.3
OPHIR PARK	7150	4/27/96	50	18.0	14.4	17.4
STEMPLE PASS	6600	4/29/96	25	7.0	6.4	10.3
STUART MOUNTAIN PILL	7400	5/01/96	---	40.4	27.5	---
STUART MOUNTAIN	7400	4/30/96	95	41.0	28.5	32.3
TOTAL -- 15 COURSES					162%	112%
			(SWE,IN=	209.3	129.4	186.3)
UPPER CLARK FORK RIVER BASIN		22-20+21				
TOTAL -- 33 COURSES					124%	110%
			(SWE,IN=	454.9	366.5	415.1)
WEST FORK BITTERROOT		23				
NEZ PERCE CMP PILLOW	5650	5/01/96	---	16.0	10.4	11.7
NEZ PERCE PASS	6570	4/27/96	44	15.6	7.5	13.9
SADDLE MTN PILLOW	7900	5/01/96	---	39.3	30.5	27.6
TOTAL -- 3 COURSES					146%	133%
			(SWE,IN=	70.9	48.4	53.2)
EAST SIDE BITTERROOT		24				
AMBROSE	6480	4/29/96	36	12.3	9.9	12.1
DALY CREEK PILLOW	5780	5/01/96	---	8.9	4.5	5.8
EAST FORK R.S.	5400	4/27/96	0	.0	.0	.9
SADDLE MTN PILLOW	7900	5/01/96	---	39.3	30.5	27.6
SKALKAHO PILLOW	7260	5/01/96	---	36.0	24.9	26.2
TOTAL -- 5 COURSES					138%	133%
			(SWE,IN=	96.5	69.8	72.6)
WEST SIDE BITTERROOT		25				
LOLO PASS PILLOW	5240	5/01/96	---	31.0	18.1	27.5
TWELVEMILE PILLOW	5600	5/01/96	---	4.9	2.8	12.4
TWIN LAKES PILLOW	6400	5/01/96	---	45.4	32.7	39.8
TOTAL -- 3 COURSES					152%	102%
			(SWE,IN=	81.3	53.6	79.7)
BITTERROOT RIVER BASIN		26-23+24+25				
TOTAL -- 10 COURSES					148%	118%
			(SWE,IN=	209.4	141.3	177.9)
LOWER CLARK FORK		27				
BAREE CREEK	5500	4/29/96	82	37.2	38.1	43.0
BAREE TRAIL	3800	4/29/96	0	.0	.0	1.3
BASSOO PEAK	5150	4/26/96	6	2.2	.0	5.7
HOODOO BASIN PILLOW	6050	5/01/96	---	58.2	40.8	47.2
HUMBOLDT GLCH PILLOW	4250	5/01/96	---	.0	.0	8.9
LOLO PASS PILLOW	5240	5/01/96	---	31.0	18.1	27.5
LOOKOUT PILLOW	5140	5/01/96	---	24.6	23.2	29.3
STUART MOUNTAIN PILL	7400	5/01/96	---	40.4	27.5	---
STUART MOUNTAIN	7400	4/30/96	95	41.0	28.5	32.3
SQUAW PEAK PILLOW	6150	5/01/96	---	16.6	11.3	14.9
TV MOUNTAIN	6800	4/30/96	55	21.0	15.6	18.7
TOTAL -- 10 COURSES					132%	101%
			(SWE,IN=	231.8	175.6	228.8)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
CLARK FORK RIVER BASIN		28=22+27				
TOTAL -- 43 COURSES					124%	104%
			(SWE,IN=	669.1	540.8	641.0)
CLARK FORK ab PEND ORIELLE LAKE		29=16+26+28				
TOTAL -- 89 COURSES					125%	109%
			(SWE,IN=	1596.8	1279.3	1468.2)
COLUMBIA IN MONTANA		30=6+9A+26+28				
TOTAL -- 93 COURSES					122%	106%
			(SWE,IN=	1693.0	1389.5	1590.4)
COLUMBIA RIVER BASIN		59=7+29				
TOTAL --122 COURSES					120%	109%
			(SWE,IN=	2275.0	1890.5	2089.5)
BEAVERHEAD		31				
BEAGLE SPGS PILLOW	8850	5/01/96	---	8.4	12.5	8.8
BLOODY DICK PILLOW	7550	5/01/96	---	19.0	16.6	10.5
CARTER CREEK	7400	5/01/96	12	3.8	13.6	---
DAD CREEK LAKE	8400	4/30/96	55	18.8	24.8	16.6
DARKHORSE LK. PILLOW	8700	5/01/96	---	40.9	40.8	35.3
DIVIDE PILLOW	7800	5/01/96	---	12.9	19.4	12.1
ELK HORN SPRINGS	7800	4/30/96	34	12.2	11.0	7.7
LAKEVIEW CANYON	6930	4/30/96	28	9.3	14.0	11.0
LAKEVIEW RDG. PILLOW	7400	5/01/96	---	11.6	15.1	9.2
LEMHI RIDGE PILLOW	8100	5/01/96	---	14.7	18.0	10.8
MULE CREEK PILLOW	8300	5/01/96	---	21.3	21.7	17.0
NOTCH	8500	4/30/96	63	21.5	37.1	18.5
TRAIL CREEK	7090	4/30/96	24	9.5	13.0	6.3
WHITE ELEPHANT PILLO	7710	5/01/96	---	34.7	43.9	27.6
WHITE PINE RIDGE	8850	4/30/96	10	3.2	13.7	5.8
TOTAL -- 14 COURSES					79%	121%
			(SWE,IN=	238.0	301.6	197.2)
RUBY		32				
BRANHAM LAKES	8850	4/30/96	100	41.8	42.3	33.2
CALL ROAD	8050	4/30/96	47	15.5	18.2	13.0
CARTER CREEK	7400	5/01/96	12	3.8	13.6	---
CLOVER MDW PILLOW	8800	5/01/96	---	23.1	26.4	19.0
DIVIDE PILLOW	7800	5/01/96	---	12.9	19.4	12.1
LOWER TWIN PILLOW	7900	5/01/96	---	22.4	30.9	21.9
MIDDLE MILL CREEK	7850	4/30/96	47	18.8	18.7	16.6
NOTCH	8500	4/30/96	63	21.5	37.1	18.5
SHORT CREEK PILLOW	7000	5/01/96	---	6.2	8.7	2.0
SMUGGLER MINE	6960	4/30/96	26	9.5	13.6	9.0
TOTAL -- 9 COURSES					80%	118%
			(SWE,IN=	171.7	215.3	145.3)
BIGHOLE		33				
ABUNDANCE LAKE	8800	4/30/96	83	32.2	28.0	22.6
BARKER LAKES PILLOW	8250	5/01/96	---	18.4	20.9	16.0
BASIN CREEK PILLOW	7180	5/01/96	---	9.8	15.8	10.0
BLOODY DICK PILLOW	7550	5/01/96	---	19.0	16.6	10.5
BULL MOUNTAIN	6600	4/26/96	10	4.4	.0	3.1
CALVERT CR PILLOW	6430	5/01/96	---	7.0	3.2	3.4
DARKHORSE LK. PILLOW	8700	5/01/96	---	40.9	40.8	35.3
ELK HORN SPRINGS	7800	4/30/96	34	12.2	11.0	7.7

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
FLEECER RIDGE	7500	4/26/96	40	14.2	13.0	8.4
FOOLHEN	8280	4/30/96	62	23.2	20.9	18.2
MOOSE CREEK PILLOW	6200	5/01/96	---	22.0	15.6	14.6
MULE CREEK PILLOW	8300	5/01/96	---	21.3	21.7	17.0
SADDLE MTN PILLOW	7900	5/01/96	---	39.3	30.5	27.6
STORM LAKE	7780	4/30/96	50	16.7	16.2	15.0
TOTAL -- 14 COURSES					110%	134%
			(SWE,IN=	280.6	254.2	209.4)
BOULDER		34				
BASIN CREEK PILLOW	7180	5/01/96	---	9.8	15.8	10.0
COPPER MOUNTAIN	7700	4/25/96	41	14.5	17.3	10.6
FROHNER MDWS PILLOW	6480	5/01/96	---	7.6	7.1	7.1
NEZ PERCE CREEK	6600	4/25/96	15	4.8	6.0	3.4
PIPESTONE PASS	7200	4/30/96	13	4.6	10.2	5.0
ROCKER PEAK PILLOW	8000	5/01/96	---	18.0	19.0	17.7
TEN MILE MIDDLE	6800	4/26/96	36	10.8	12.8	12.4
TOTAL -- 7 COURSES					79%	106%
			(SWE,IN=	70.1	88.2	66.2)
JEFFERSON RIVER BASIN		35=31+32+33+34				
TOTAL -- 37 COURSES					89%	123%
			(SWE,IN=	622.8	696.9	507.0)
MADISON above HEBGEN LAKE		36				
BLACK BEAR PILLOW	7950	5/01/96	---	54.3	64.9	39.8
MADISON PLT PILLOW	7750	5/01/96	---	30.6	35.6	23.8
NORRIS BASIN	7500	5/01/96	31	12.5	9.4	7.5
OLD FAITHFUL	7400	4/27/96	45	18.5	12.2	10.0
WEST YELLOWSTONE	6700	4/29/96	21	8.3	12.4	7.1
WHISKEY CREEK PILLOW	6800	5/01/96	---	19.8	24.3	15.2
TOTAL -- 6 COURSES					91%	139%
			(SWE,IN=	144.0	158.8	103.4)
MADISON below HEBGEN LAKE		37				
BEAVER CREEK PILLOW	7850	5/01/96	---	23.2	25.3	20.5
CALL ROAD	8050	4/30/96	47	15.5	18.2	13.0
CARROT BASIN PILLOW	9000	5/01/96	---	38.7	39.7	31.2
CLOVER MDW PILLOW	8800	5/01/96	---	23.1	26.4	19.0
FOUR MILE	6900	4/30/96	16	6.6	8.0	6.9
HEBGEN DAM	6550	5/01/96	---	8.5E	9.3	6.8
LAKE CREEK	6100	4/30/96	10	3.2	7.3	3.1
LONE MOUNTAIN PILLOW	8880	5/01/96	---	29.5	26.2	20.8
LOWER TWIN PILLOW	7900	5/01/96	---	22.4	30.9	21.9
POTOMAGETON PARK	7150	5/01/96	---	10.0E	12.6	9.4
TEPEE CREEK PILLOW	8000	5/01/96	---	16.2	21.9	13.0
TOTAL -- 11 COURSES					87%	119%
			(SWE,IN=	196.9	225.8	165.6)
MADISON RIVER BASIN		38=36+37				
TOTAL -- 17 COURSES					89%	127%
			(SWE,IN=	340.9	384.6	269.0)
UPPER GALLATIN		39				
BEAR BASIN	8150	4/25/96	68	24.8	26.2	22.0
BEAVER CREEK PILLOW	7850	5/01/96	---	23.2	25.3	20.5
CARROT BASIN PILLOW	9000	5/01/96	---	38.7	39.7	31.2
LITTLE PARK	7400	4/25/96	53	18.6	19.2	16.4
LONE MOUNTAIN PILLOW	8880	5/01/96	---	29.5	26.2	20.8

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
ROCK CREEK MEADOW	8160	5/01/96	82	28.7	25.8	24.2
TWENTY-ONE MILE	7150	4/29/96	45	19.0	20.9	14.8
TOTAL -- 7 COURSES					100%	122%
			(SWE,IN=	182.5	183.3	149.9)
HYALITE	40					
ARCH FALLS	7350	4/25/96	49	15.4	14.6	13.7
LICK CREEK PILLOW	6860	5/01/96	---	11.3	15.7	11.2
SHOWER FALLS PILLOW	8100	5/01/96	---	32.1	29.3	28.0
TOTAL -- 3 COURSES					99%	111%
			(SWE,IN=	58.8	59.6	52.9)
BRIDGER	75					
BRIDGER BOWL	7250	4/25/96	74	28.7	32.3	29.0
BRACKETT CR PILLOW	7320	5/01/96	---	27.7	28.1	---
MAYNARD CREEK	6210	4/25/96	30	9.7	13.5	15.2
SACAJAWEA	6550	4/25/96	33	11.9	15.6	12.7
TOTAL -- 3 COURSES					82%	88%
			(SWE,IN=	50.3	61.4	56.9)
GALLATIN RIVER BASIN	41=39+40+75					
TOTAL -- 13 COURSES					96%	112%
			(SWE,IN=	291.6	304.3	259.7)
MISSOURI HEADWATERS	42=35+38+41					
TOTAL -- 60 COURSES					89%	121%
			(SWE,IN=	1063.6	1188.6	881.7)
HEADWATERS MISSOURI MAINSTEM	43					
BOULDER MTN PILLOW	7950	5/01/96	---	25.3	26.9	21.7
CHESSMAN RESERVOIR	6200	5/01/96	0	.0	.5	2.4
FROHNER MDWS PILLOW	6480	5/01/96	---	7.6	7.1	7.1
NEVADA CREEK PILLOW	6480	5/01/96	---	18.1	14.2	12.5
NEVADA RIDGE PILLOW	7020	5/01/96	---	20.2	12.3	---
ROCKER PEAK PILLOW	8000	5/01/96	---	18.0	19.0	17.7
STEMPLE PASS	6600	4/29/96	25	7.0	6.4	10.3
TEN MILE LOWER	6600	4/26/96	7	2.0	5.6	5.4
TEN MILE MIDDLE	6800	4/26/96	36	10.8	12.8	12.4
TIZER BASIN PILLOW	6840	5/01/96	---	8.9	13.8	10.3
TOTAL -- 9 COURSES					92%	98%
			(SWE,IN=	97.7	106.3	99.8)
SMITH	44					
BOULDER MTN PILLOW	7950	5/01/96	---	25.3	26.9	21.7
DEADMAN CR PILLOW	6450	5/01/96	---	8.0	8.0	6.9
ELK PEAK	8000	4/25/96	50	17.0	17.6	19.2
GRASSHOPPER	7000	4/27/96	6	1.9	5.2	4.6
PICKFOOT CRK PILLOW	6650	5/01/96	---	8.3	3.9	4.8
SPUR PARK PILLOW	8100	5/01/96	---	27.0	23.0	23.6
TOTAL -- 6 COURSES					103%	108%
			(SWE,IN=	87.5	84.6	80.8)
JUDITH	46					
BIG SNOWY	7150	4/30/96	62	20.4	26.9	24.3
CRYSTAL LAKE PILLOW	6050	5/01/96	---	4.0	15.2	10.9
DAISY PEAK	7600	4/29/96	31	9.8	9.9	8.7
DEADMAN CR PILLOW	6450	5/01/96	---	8.0	8.0	6.9
HAYMAKER	8050	NO REPORT			---	---
KINGS HILL	7500	NO REPORT			---	15.2
ROCK CREEK	5600	4/30/96	0	.0	8.4	5.4

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
SPUR PARK PILLOW	8100	5/01/96	---	27.0	23.0	23.6
TOTAL -- 6 COURSES					76%	87%
			(SWE,IN=	69.2	91.4	79.8)
MUSSELSHELL		51				
DAISY PEAK	7600	4/29/96	31	9.8	9.9	8.7
ELK PEAK	8000	4/25/96	50	17.0	17.6	19.2
GRASSHOPPER	7000	4/27/96	6	1.9	5.2	4.6
JOHNSON PARK	6450	4/29/96	0	.0	.0	2.3
PORCUPINE PILLOW	6500	5/01/96	---	6.1	8.7	3.9
TOTAL -- 5 COURSES					84%	90%
			(SWE,IN=	34.8	41.4	38.7)
SMITH-JUDITH-MUSSELSHELL BASINS		50=44+46+51				
TOTAL -- 12 COURSES					83%	94%
			(SWE,IN=	127.8	153.7	136.3)
SUN		47				
CABIN CREEK	5200	4/28/96	6	1.6	.1	1.9
FIVE-BULL	5700	5/01/96	0	.0	1.0	3.2
GOAT MOUNTAIN	7000	4/28/96	26	7.6	2.3	8.6
MT LOCKHART PILLOW	6400	5/01/96	---	25.4	19.2	21.9
WOOD CREEK PILLOW	5960	5/01/96	---	10.3	7.3	8.6
WRONG CREEK	5700	4/25/96	32	10.6	1.6	9.2
WRONG RIDGE	6800	4/26/96	55	18.8	13.0	18.6
TOTAL -- 7 COURSES					167%	103%
			(SWE,IN=	74.3	44.5	72.0)
TETON		73				
DUPUYER CREEK PILLOW	5750	5/01/96	---	9.1	3.5	8.5
FREIGHT CREEK	6000	5/01/96	---	11.0E	10.4	13.2
MT LOCKHART PILLOW	6400	5/01/96	---	25.4	19.2	21.9
WALDRON PILLOW	5600	5/01/96	---	9.4	4.5	6.5
TOTAL -- 4 COURSES					146%	110%
			(SWE,IN=	54.9	37.6	50.1)
MARIAS		48				
BADGER PASS PILLOW	6900	5/01/96	---	41.0	34.8	37.8
BLUE LAKE	5900	5/01/96	---	20.0E	18.7	23.9
DUPUYER CREEK PILLOW	5750	5/01/96	---	9.1	3.5	8.5
FREIGHT CREEK	6000	5/01/96	---	11.0E	10.4	13.2
MARIAS PASS	5250	4/29/96	37	14.5	5.2	14.4
PIKE CREEK PILLOW	5930	5/01/96	---	29.8	20.3	27.8
TOTAL -- 6 COURSES					135%	100%
			(SWE,IN=	125.4	92.9	125.6)
SUN-TETON-MARIAS RIVER BASINS		49=47+48+73				
TOTAL -- 14 COURSES					147%	102%
			(SWE,IN=	209.1	141.9	204.1)
MISSOURI MAINSTEM above FORT PECK		52=43+49+50				
TOTAL -- 34 COURSES					109%	98%
			(SWE,IN=	409.3	375.0	418.5)
BEARPAW MOUNTAINS		53				
BOXELDER CREEK	5100	4/29/96	7	2.2	2.6	2.2
KIWANIS CAMP	3720	4/29/96	0	.0	.0	.2
ROCKY BOY	4700	4/29/96	0	.0	.0	1.4
SUCKER CREEK	3960	4/29/96	0	.0	.0	.3

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
TAYLOR ROAD	4080	4/29/96	0	.0	.0	.5
TOTAL -- 5 COURSES					85%	48%
			(SWE,IN=	2.2	2.6	4.6)
MILK RIVER BASIN		54=53+58				
TOTAL -- 5 COURSES					85%	48%
			(SWE,IN=	2.2	2.6	4.6)
MISSOURI MAINSTEM RIVER BASIN		45=43+49+50+54				
TOTAL -- 39 COURSES					109%	97%
			(SWE,IN=	411.5	377.6	423.1)
MISSOURI RIVER BASIN		55=42+45				
TOTAL -- 96 COURSES					94%	113%
			(SWE,IN=	1438.7	1527.3	1267.6)
ST. MARY		56				
FLATTOP MTN PILLOW	6300	5/01/96	---	58.5	49.7	48.4
ICEBERG LAKE NO 3	5600	4/26/96	62	26.1	24.5	29.2
JOSEPHINE LOWER NO 9	4900	4/25/96	19	6.9	4.8	15.1
MANY GLACIER PILLOW	4900	5/01/96	---	2.3	.0	8.0
MINERAL CREEK	4000	4/29/96	28	12.0	3.4	11.2
MOUNT ALLEN NO 7	5700	4/25/96	85	35.6	34.9	43.8
PIEGAN PASS NO 6	5500	4/25/96	61	24.4	29.2	37.5
PTARMIGAN	5800	4/26/96	76	32.8	29.6	36.2
TOTAL -- 8 COURSES					113%	87%
			(SWE,IN=	198.6	176.1	229.4)
ST. MARY and MILK RIVER BASINS		57=54+56				
TOTAL -- 13 COURSES					112%	86%
			(SWE,IN=	200.8	178.7	234.0)
YELLOWSTONE above LIVINGSTON		60				
CANYON PILLOW	8090	5/01/96	---	20.5	16.8	10.9
FISHER CREEK PILLOW	9100	5/01/96	---	50.6	38.9	38.7
LAKE CAMP	7780	5/01/96	40	13.6	13.5	7.2
LUPINE CREEK	7380	5/01/96	23	9.6	6.5	6.6
MILL CREEK	7500	5/01/96	43	14.8	13.4	11.0
N.E. ENTRANCE PILLOW	7350	5/01/96	---	9.2	5.2	5.9
NORRIS BASIN	7500	5/01/96	31	12.5	9.4	7.5
PARKERS PEAK PILLOW	9400	5/01/96	---	31.8	28.3	23.7
ROCK CREEK MEADOW	8160	5/01/96	82	28.7	25.8	24.2
SHOWER FALLS PILLOW	8100	5/01/96	---	32.1	29.3	28.0
SYLVAN ROAD PILLOW	7120	5/01/96	---	18.9	12.4	7.9
THUMB DIVIDE PILLOW	7980	5/01/96	---	25.5	21.7	15.1
TWO OCEAN PILLOW	9240	5/01/96	---	46.5	40.0	27.6
WHITE MILL PILLOW	8700	5/01/96	---	39.5	29.0	26.3
YOUNTS PEAK PILLOW	8350	5/01/96	---	25.0	18.8	18.3
TOTAL -- 15 COURSES					123%	146%
			(SWE,IN=	378.8	309.0	258.9)
SHIELDS		61				
BRACKETT CR PILLOW	7320	5/01/96	---	27.7	28.1	---
BRIDGER BOWL	7250	4/25/96	74	28.7	32.3	29.0
MAYNARD CREEK	6210	4/25/96	30	9.7	13.5	15.2
PORCUPINE PILLOW	6500	5/01/96	---	6.1	8.7	3.9
SACAJAWEA	6550	4/25/96	33	11.9	15.6	12.7
S.F. SHIELDS PILLOW	8100	5/01/96	---	24.2	26.5	19.1
TOTAL -- 5 COURSES					83%	101%
			(SWE,IN=	80.6	96.6	79.9)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
BOULDER-STILLWATER	62					
BOX CANYON PILLOW	6700	5/01/96	---	12.6	5.5	3.8
INDEPENDENCE	7850	4/29/96	71	25.0	16.2	17.0
MONUMENT PK PILLOW	8850	5/01/96	---	30.3	25.5	23.8
PLACER BASIN PILLOW	8830	5/01/96	---	25.2	23.0	21.2
TOTAL -- 4 COURSES					133%	141%
			(SWE,IN=	93.1	70.2	65.8)
CLARK'S FORK-ROCK CREEK	63					
BEARTOOTH LK. PILLOW	9280	5/01/96	---	39.6	27.6	26.0
BOTS SOTS	7750	4/29/96	35	10.2	10.0	8.1
CAMP SENIA	7890	4/29/96	34	9.4	9.7	8.4
COLE CREEK PILLOW	7850	5/01/96	---	21.8	25.6	20.6
EVENING STAR PILLOW	9200	5/01/96	---	44.3	38.1	30.8
FISHER CREEK PILLOW	9100	5/01/96	---	50.6	38.9	38.7
N.E. ENTRANCE PILLOW	7350	5/01/96	---	9.2	5.2	5.9
PARKERS PEAK PILLOW	9400	5/01/96	---	31.8	28.3	23.7
SILVER RUN PILLOW	6630	5/01/96	---	.0	2.2	1.2
TIMBERLINE CREEK	8850	4/29/96	67	23.0	20.2	17.8
WHITE MILL PILLOW	8700	5/01/96	---	39.5	29.0	26.3
WILLOW CREEK	6500	4/29/96	13	4.0	5.8	4.4
WOLVERINE PILLOW	7650	5/01/96	---	13.9	9.8	8.1
TOTAL -- 13 COURSES					119%	135%
			(SWE,IN=	297.3	250.4	220.0)
UPPER YELLOWSTONE RIVER BASIN	64=60+61+62+63					
TOTAL -- 33 COURSES					115%	136%
			(SWE,IN=	718.7	624.8	530.0)
WIND RIVER (Wyoming)	65					
BLUE RIDGE	9620	4/26/96	38	12.6	16.3	12.7
BURROUGHS CRK PILLOW	8750	5/01/96	---	22.7	18.4	12.9
CASTLE CREEK	8400	4/25/96	18	5.3	5.7	2.0
CHRISTINA LK PILLOW	9980	5/01/96	---	16.0	19.2	18.0
COLD SPRINGS PILLOW	9630	5/01/96	---	6.6	8.4	6.8
DU NOIR	8760	4/30/96	27	7.7	9.6	6.8
GEYSER CREEK	8500	4/30/96	25	9.3	6.7	5.4
GRANNIER MEADOWS	8860	4/26/96	46	14.9	13.4	15.1
HOBBS PARK PILLOW	10100	5/01/96	---	21.0	23.3	18.0
KIRWIN PILLOW	9550	5/01/96	---	19.5	17.1	13.1
LITTLE WARM PILLOW	9370	5/01/96	---	17.6	15.5	10.4
MIDDLE FORK	7420	4/26/96	12	3.8	5.5	5.0
OWL CREEK PILLOW	8980	5/01/96	---	5.7	11.1	3.4
SHERIDAN R.S.	7750	4/28/96	11	3.3	3.4	3.2
SOUTH PASS PILLOW	9040	5/01/96	---	14.9	21.5	18.1
ST LAWRENCE ALT PILL	8620	5/01/96	---	5.3	7.0	5.4
T CROSS RANCH	7900	4/25/96	19	6.8	3.1	3.6
TOGWOTEE PASS PILLOW	9580	4/30/96	103	42.1	29.1	28.3
TOWNSEND CRK PILLOW	8700	5/01/96	---	10.5	13.2	9.5
YOUNTS PEAK PILLOW	8350	5/01/96	---	25.0	18.8	18.3
TOTAL -- 20 COURSES					102%	125%
			(SWE,IN=	270.6	266.3	216.0)
SHOSHONE RIVER (Wyoming)	76					
BLACKWATER PILLOW	9780	5/01/96	---	39.0	29.3	22.9
CARTER MOUNTAIN	7950	4/29/96	18	4.9	6.4	6.0
EVENING STAR PILLOW	9200	5/01/96	---	44.3	38.1	30.8
MARQUETTE PILLOW	8760	5/01/96	---	14.6	17.4	8.6
SYLVAN LAKE PILLOW	8420	NO REPORT			30.6	23.8

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
SYLVAN ROAD PILLOW	7120	5/01/96	---	18.9	12.4	7.9
YOUNTS PEAK PILLOW	8350	5/01/96	---	25.0	18.8	18.3
TOTAL -- 6 COURSES					120%	155%
			(SWE,IN=	146.7	122.4	94.5)
BIGHORN RIVER (Wyoming)		66				
BALD MOUNTAIN PILLOW	9380	5/01/96	---	26.0	22.2	24.1
BEAR TRAP PILLOW	8200	5/01/96	---	4.1	4.7	4.2
BLACKWATER PILLOW	9780	5/01/96	---	39.0	29.3	22.9
BONE SPGS. PILLOW	9350	5/01/96	---	23.9	19.8	18.4
CARTER MOUNTAIN	7950	4/29/96	18	4.9	6.4	6.0
EVENING STAR PILLOW	9200	5/01/96	---	44.3	38.1	30.8
GRAVE SPRINGS PILLOW	8550	5/01/96	---	12.0	13.5	---
KIRWIN PILLOW	9550	5/01/96	---	19.5	17.1	13.1
LOST CREEK PILLOW	8080	5/01/96	---	16.5	21.6	15.8
MARQUETTE PILLOW	8760	5/01/96	---	14.6	17.4	8.6
MEDICINE LODGE LAKES	9340	4/29/96	46	13.1	12.6	12.5
MIDDLE POWDER PILLOW	7760	5/01/96	---	16.6	19.6	14.8
ONION GULCH	8780	4/26/96	42	12.4	8.1	8.9
OWL CREEK PILLOW	8980	5/01/96	---	5.7	11.1	3.4
POWDER RVR.PASS PILL	9480	5/01/96	---	15.7	13.4	10.5
RANGER CREEK	8120	4/29/96	33	10.0	10.6	8.1
SHELL CREEK PILLOW	9580	5/01/96	---	19.8	20.8	17.0
SYLVAN ROAD PILLOW	7120	5/01/96	---	18.9	12.4	7.9
TIMBER CREEK PILLOW	7950	5/01/96	---	6.1	9.0	6.0
TYRELL RANGER STA.	8300	4/26/96	29	8.4	7.1	7.5
YOUNTS PEAK PILLOW	8350	5/01/96	---	25.0	18.8	18.3
TOTAL -- 20 COURSES					108%	133%
			(SWE,IN=	344.5	320.1	258.8)
LITTLE BIGHORN (WYOMING)		68				
BALD MOUNTAIN PILLOW	9380	5/01/96	---	26.0	22.2	24.1
BURGESS JCT. PILLOW	7880	5/01/96	---	15.3	12.9	13.5
NORTH TONGUE	8450	4/29/96	48	13.6	12.5	13.9
TOTAL -- 3 COURSES					115%	107%
			(SWE,IN=	54.9	47.6	51.5)
TONGUE RIVER (Wyoming)		69				
BIG GOOSE	7760	4/26/96	22	6.4	9.9	8.3
BONE SPGS. PILLOW	9350	5/01/96	---	23.9	19.8	18.4
BURGESS JCT. PILLOW	7880	5/01/96	---	15.3	12.9	13.5
DOME LAKE PILLOW	8880	5/01/96	---	15.6	13.7	15.0
NORTH TONGUE	8450	4/29/96	48	13.6	12.5	13.9
SAWMILL DIVIDE	9260	4/26/96	60	18.2	16.3	15.6
SHELL CREEK PILLOW	9580	5/01/96	---	19.8	20.8	17.0
SUCKER CREEK PILLOW	8880	5/01/96	---	15.8	14.4	13.8
TIE CREEK PILLOW	6870	5/01/96	---	4.1	3.3	---
WOOD ROCK G.S.	8440	4/26/96	45	13.2	10.8	12.2
TOTAL -- 9 COURSES					108%	111%
			(SWE,IN=	141.8	131.1	127.7)
POWDER RIVER (Wyoming)		70				
BEAR TRAP PILLOW	8200	5/01/96	---	4.1	4.7	4.2
CLOUD PEAK PILLOW	9850	5/01/96	---	21.9	19.2	17.7
GRAVE SPRINGS PILLOW	8550	5/01/96	---	12.0	13.5	---
HANSEN S.M. PILLOW	8360	5/01/96	---	5.4	6.2	6.9
LOST CREEK PILLOW	8080	5/01/96	---	16.5	21.6	15.8
MIDDLE POWDER PILLOW	7760	5/01/96	---	16.6	19.6	14.8
ONION GULCH	8780	4/26/96	42	12.4	8.1	8.9

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
POWDER RVR.PASS PILL	9480	5/01/96	---	15.7	13.4	10.5
SOUR DOUGH	8460	4/26/96	29	8.6	9.6	6.9
TOTAL -- 8 COURSES					99%	118%
			(SWE,IN=	101.2	102.4	85.7)
LOWER YELLOWSTONE RIVER BASIN		67=65+66+68+69+70				
TOTAL -- 47 COURSES					105%	124%
			(SWE,IN=	698.9	664.9	563.8)
YELLOWSTONE RIVER BASIN		71=64+67				
TOTAL -- 75 COURSES					109%	128%
			(SWE,IN=1300.1		1193.2	1016.7)
MISSOURI plus YELLOWSTONE		74=55+71				
TOTAL --163 COURSES					101%	121%
			(SWE,IN=2603.0		2576.9	2157.8)
MONTANA		72=30+42+52+53+64				
TOTAL --201 COURSES					109%	114%
			(SWE,IN=3460.4		3176.0	3039.2)

MONTANA Water Supply Outlook Report as of May 1, 1996

Once again, April did not want to warm up and quit snowing! Several cold fronts moved across Montana increasing snow water in all the mountainous areas, with the most significant increases in the southwestern and southcentral regions. Air temperatures have been below average and have delayed spring runoff. Normally mountain snowpack has peaked and beginning to melt by this time of year. However, this year is very similar to last year where mid to high elevation snowpacks are still gaining! With the combination of near average to well above average snowpack and precipitation, it continues to appear there will not be severe water shortages this spring and summer.

SNOWPACK

As of May 1, mountain snow water for Montana was 14 percent above average; 9 percent above last year; and increased 9 percent during April. Several storms added substantial snow water to many regions across the state during April. Several snow data stations in the southwestern and southcentral regions continue to set new record high snow water amounts.

West of the Continental Divide, snow water content was 7 above below average; 20 percent above last year; and increased 7 percent during April. East of the Continental Divide, snow water content was 20 percent above average; 1 percent above last year; and increased 7 percent during April.

RIVER BASIN	% OF AVERAGE	% OF LAST YEAR
COLUMBIA	107	122
KOOTENAI	96	103
FLATHEAD	112	130
UPPER CLARK FORK	110	123
BITTERROOT	118	148
LOWER CLARK FORK	101	132
MISSOURI	113	94
MISSOURI HEADWATERS	121	89
JEFFERSON	123	89
MADISON	127	89
GALLATIN	112	96
MISSOURI MAINSTEM	97	109
HEADWATERS MAINSTEM	98	92
SMITH-JUDITH-MUSSELSHELL	94	83
SUN-TETON-MARIAS	102	147
MILK (BEARPAW MTNS.)	48	85
ST. MARY	87	113
ST. MARY AND MILK	86	112
YELLOWSTONE (MONTANA & WYOMING)	127	108
UPPER YELLOWSTONE	136	115
LOWER YELLOWSTONE (WYOMING)	123	103
WIND	122	96
SHOSHONE	155	120
BIGHORN	133	108
TONGUE	111	108
POWDER	118	99

PRECIPITATION

The combined mountain and valley April precipitation across the state was 20 percent above average and 4 percent below last year, while water year precipitation was 30 percent above average and 39 percent above last year. Not only are snow data stations setting new record highs, but several precipitation stations have set new record highs in many regions across the state from October 1 to May 1.

West of the Continental Divide, combined mountain and valley April precipitation was 52 percent above average and 57 percent above last year and water year precipitation was 39 percent above average and 38 percent above last year. East of the Continental Divide, combined mountain and valley April precipitation was 10 percent above average and 3 percent below last year and water year precipitation was 27 percent above average and 16 percent above last year.

RIVER BASIN	APRIL % OF AVERAGE	WATER YEAR % OF AVERAGE
COLUMBIA	152	139
KOOTENAI	129	137
FLATHEAD	146	138
UPPER CLARK FORK	135	128
BITTERROOT	190	150
LOWER CLARK FORK	178	147
MISSOURI	106	117
JEFFERSON	123	118
MADISON	123	114
GALLATIN	110	115
MISSOURI MAINSTEM	93	103
SMITH-JUDITH-MUSSELSHELL	112	94
SUN-TETON-MARIAS	98	126
MILK	82	127
ST. MARY	117	141
YELLOWSTONE	107	123
UPPER YELLOWSTONE	105	128
LOWER YELLOWSTONE	110	121
WIND	89	113
SHOSHONE	121	144
BIGHORN	145	117
TONGUE	119	120
POWDER	105	114

RESERVOIRS

Major reservoir storage across the state was 14 percent above average and 29 percent above last year.

West of the Continental Divide, reservoir storage was 22 percent above average and 10 percent above last year. East of the Continental Divide, reservoir storage was 51 percent above average and 52 percent above last year.

RIVER BASIN	% OF AVERAGE	% OF LAST YEAR
COLUMBIA	122	110
KOOTENAI	96	79
FLATHEAD	102	113
UPPER CLARK FORK	118	111
BITTERROOT	139	147

RESERVOIRS (continued)

RIVER BASIN	% OF AVERAGE	% OF LAST YEAR
LOWER CLARK FORK	155	99
MISSOURI	116	116
JEFFERSON	106	112
MADISON	107	118
GALLATIN	119	102
MISSOURI MAINSTEM	96	96
SMITH-JUDITH-MUSSELSHELL	128	120
SUN-TETON-MARIAS	134	124
MILK	123	139
ST. MARY	186	188
ST. MARY AND MILK	100	136
YELLOWSTONE	98	92
UPPER YELLOWSTONE	100	87
LOWER YELLOWSTONE	96	97

STREAMFLOW

SEASONAL STREAMFLOW FORECASTS

Streamflow forecasts, for the period May through July, across Montana were 16 percent above average and 26 percent above last years forecasts.

Streams west of the Divide should reach their snowmelt peak flows during mid to late May and streams east of the Divide should reach their peak flows in early to mid June.

West of the Continental Divide, May through July streamflows are forecast to be 16 percent above average and 40 percent above last years forecasts. East of the Continental Divide, May through July streamflows are forecast to be 16 percent above average and 21 percent above last years forecasts.

RIVER BASIN	FORECASTS % OF AVERAGE	FORECASTS % OF LAST YEAR
COLUMBIA	116	140
KOOTENAI	117	130
FLATHEAD	121	152
UPPER CLARK FORK	106	146
BITTERROOT	125	160
LOWER CLARK FORK	113	114
MISSOURI	113	113
JEFFERSON	116	85
MADISON	117	87
GALLATIN	111	95
MISSOURI MAINSTEM	126	102
SMITH-JUDITH-MUSSELSHELL	98	101
SUN-TETON-MARIAS	117	160
MILK	103	160
ST. MARY	109	132
ST. MARY AND MILK	108	135
YELLOWSTONE	128	117
UPPER YELLOWSTONE	125	118
LOWER YELLOWSTONE	130	116

NOTE: The FORECAST AS % OF LAST YEAR column above, is this years forecast as a percent of last years forecast, not of what actually occurred.

PEAK STREAMFLOW FORECASTS

COLUMBIA RIVER

Major tributaries to the Kootenai in Montana are expected to peak near mid May. The Flathead is expected to peak in late May or early June. The Lower Willow Creek and Nevada Creek inflows are expected to peak in late May. The Swan, Blackfoot, Clark Fork, and Bitterroot Rivers are expected to peak early to mid June. Rock Creek, near Phillipsburg, is expected to peak near mid June.

MISSOURI RIVER

Inflow to Clark Canyon, Gibson and Ruby Reservoirs are expected to peak in late May or early June. Sheep Creek is expected to peak in late May. Swift and Hebgen Reservoir inflows, and the Big Hole River are expected to peak in early to mid June. The Missouri at Toston, Gallatin River and Smith River are expected to peak near mid June.

YELLOWSTONE RIVER

All major tributaries are expected to peak near mid to third week in June.

PEAK STREAMFLOW FORECASTS FOR UNREGULATED STREAMS ARE AS FOLLOWS:

	PEAK DAILY Range (CFS)	PEAK DAILY % OF AVERAGE
COLUMBIA RIVER		
Blackfoot near Bonner	8,100 to 11,500	89 to 127
Clark Fork above Missoula	14,500 to 21,000	92 to 134
Bitterroot near Darby	5,500 to 8,000	94 to 136
Clark Fork below Missoula	29,500 to 41,500	97 to 137
Clark Fork at St. Regis	35,000 to 50,000	92 to 132
North Fork Flathead near Columbia Falls	21,750 to 29,250	106 to 143
Middle Fork Flathead near West Glacier	20,250 to 26,250	92 to 119
MISSOURI RIVER		
Big Hole near Melrose	7,200 to 10,300	98 to 140
Ruby above Ruby Reservoir	700 to 1,100	71 to 111
Gallatin near Gateway	5,100 to 6,400	98 to 123
Gallatin near Logan	4,900 to 6,800	92 to 128
Missouri at Toston	19,500 to 27,500	109 to 154
Marias near Shelby	5,200 to 8,600	96 to 159
South Fork Musselshell above Martinsdale	500 to 850	41 to 69
YELLOWSTONE RIVER		
Yellowstone at Corwin Springs	18,000 to 24,000	107 to 142
Yellowstone at Livingston	20,500 to 27,000	103 to 136
Boulder near Big Timber	4,150 to 6,100	82 to 121
Stillwater near Absarokee	5,500 to 8,300	87 to 132
Clarks Fork near Belfry	6,500 to 9,200	87 to 123
Yellowstone at Billings	45,500 to 60,500	111 to 148

NOTE: The low number in the flow range represents the maximum daily flow that would be expected to occur with little rainfall during the peak snowmelt period. The high number in the flow range could be expected with moderate amounts of rain about the same time as maximum snowmelt runoff is occurring.

SURFACE WATER SUPPLY INDEX

The Surface Water Supply Index (SWSI) is an indicator of surface water supply conditions for the spring and summer months. Water users that rely on mountain precipitation can use the index to evaluate seasonal surface water supplies. The SWSI accounts for mountain snowpack, mountain precipitation, streamflow, reservoir storage, and soil moisture.

SWSI RATING	SURFACE WATER CONDITION
+3.0 to +4.0	Extremely Wet
+2.0 to +3.0	Moderately Wet
+1.0 to +2.0	Slightly Wet
-1.0 to +1.0	Near Average
-1.0 to -2.0	Slightly Dry
-2.0 to -3.0	Moderately Dry
-3.0 to -4.0	Extremely Dry

SWSI	Basin
+2.3	Kootenai River at Ft. Steele (Kootenai in Canada)
+2.0	Tobacco River
+2.2	Kootenai Ft. Steele to Libby Dam
+1.2	Kootenai River below Libby Dam
-0.4	Fisher River
+0.7	Yaak River
+1.8	North Fork Flathead River
+1.7	Middle FORK Flathead River
+1.2	South Fork Flathead River
+1.5	Flathead River at Columbia Falls
+1.9	Stillwater/Whitefish Rivers
+1.1	Swan River
+1.8	Flathead River at Polson
+1.4	Mission Valley
+0.9	Little Bitterroot River
+1.4	Clark Fork River above Rock Creek
+1.7	Blackfoot River
+1.6	Clark Fork River above Missoula
+2.0	Bitterroot River
+1.7	Clark Fork River below Bitterroot River
+1.8	Clark Fork River below Flathead River
+1.8	Beaverhead River
+0.7	Ruby River
+2.2	Big Hole River
+0.2	Boulder River (Jefferson)
+1.8	Jefferson River
+1.7	Madison River
+1.1	Gallatin River
+1.6	Missouri River above Canyon Ferry
+1.0	Missouri River below Canyon Ferry
+0.7	Smith River
+1.4	Sun River
+1.9	Teton River
+1.9	Birch/Dupuyer Creeks
+1.5	Marias River
+0.4	Musselshell River
+1.7	Missouri River above Ft. Peck
+1.7	Missouri River below Ft. Peck
+0.3	Milk River
+3.0	Yellowstone River above Livingston
+1.0	Shields River
+2.0	Boulder River (Yellowstone)

+2.5	Stillwater River
+3.0	Rock/Red Lodge Creeks
+3.2	Clarks Fork River
+3.0	Yellowstone River above Bighorn River
+0.9	Bighorn River below Bighorn Lake
0.0	Little Bighorn River
+2.1	Yellowstone River below Bighorn River
+1.0	Tongue River
+0.9	Powder River

KOOTENAI RIVER BASIN in Montana as of May 1, 1996

Snowpack conditions in the Kootenai River Basin of Montana and Canada were slightly above average. Snow water content for the Kootenai in Montana was 4 percent below average; 3 percent above last year; and increased 4 percent during April. Snow water content for the East Kootenai in Canada was 17 percent above average; 18 percent above last year; and decreased 3 percent during April.

Mountain precipitation during April was 30 percent above average and 78 percent above last year. Valley precipitation during April was 26 percent above average and 17 percent above last year. Water year precipitation, beginning October 1, 1993, was 37 percent above average and 33 percent above last year.

Lake Koocanusa storage, on the last day of April, was 4 percent below average and 21 percent below last year.

Streamflows, for the period May through July, are forecast to be 17 percent above average and 30 percent above last years forecasts.

The Fisher River near Libby is forecast to reach peak flows between May 12 and May 18 with daily peak flow ranging from 1,750 cfs to 2,700 cfs or 29 percent below average to 9 percent above average. The Yaak near Troy is forecast to reach peak flows between May 12 and May 18 with daily peak flows ranging from 5,300 cfs to 8,200 cfs or 12 percent below average to 36 percent above average.

Surface Water Supply Index (SWSI) was +2.3 in the Kootenai River at Ft. Steele (Kootenai in Canada); +2.0 in the Tobacco River; +2.2 in the Kootenai Ft. Steele to Libby Dam; +1.2 in the Kootenai River below Libby Dam; -0.4 in the Fisher River; and +0.7 in the Yaak River.

Streamflow Forecasts

Forecast Pt / Forecast Period	<--- Drier --- Future Conditions --- Wetter ---> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	50% (Most Prob) (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
TOBACCO RIVER nr Eureka							
MAY-JUL	120	132	140	127	148	160	110
MAY-SEP	135	150	160	129	170	185	124
LIBBY RES Inflow (1,2)							
MAY-JUL	5405	6055	6350	120	6645	7295	5301
MAY-SEP	6508	7280	7630	121	7980	8752	6294
FISHER RIVER near Libby							
MAY-JUL	125	140	150	92	160	175	163
MAY-SEP	138	154	165	92	176	192	179
YAAK RIVER near Troy							
MAY-JUL	368	393	410	110	427	452	372
MAY-SEP	393	418	435	110	452	477	394

Streamflow Forecasts (continued)

Forecast Pt Forecast Period	<--- Drier --- Future Conditions --- Wetter ---> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
KOOTENAI at Leonia (1,2)							
MAY-JUL	6006	6800	7160	115	7520	8314	6223
MAY-SEP	7143	8069	8490	116	8911	9837	7304

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

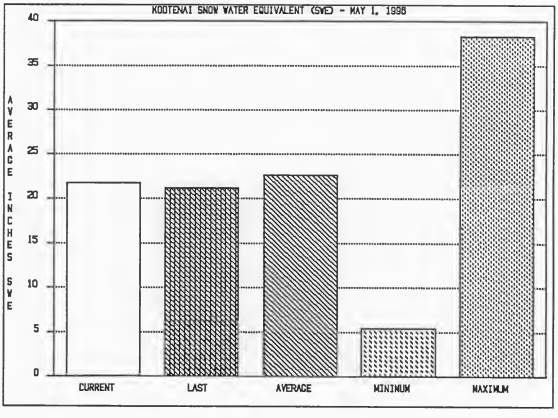
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********** This Year	Last Year	Average
LAKE KOOCANUSA	5748.0	2306.0	2924.0	2409.0

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
KOOTENAI MAINSTEM	3	99	97
TOBACCO	3	122	130
FISHER	5	98	77
YAAK	7	97	90
KOOTENAI ab BONNERS FERRY	42	111	107
KOOTENAI in MONTANA	17	103	96



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1977.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1974.

FLATHEAD RIVER BASIN as of May 1, 1996

Snowpack conditions in the Flathead River Basin of Montana and Canada were above average. Snow water content for the Flathead in Montana was 12 percent above average; 30 percent above last year; and increased 9 percent during April. Snow water content for the Flathead in Canada was 15 percent above average; 8 percent above last year; and increased 7 percent during April.

Mountain precipitation during April was 42 percent above average and 64 percent above last year. Valley precipitation during April was 98 percent above average and 98 percent above last year. Water year precipitation, beginning October 1, 1993, was 38 percent above average and 36 percent above last year.

Reservoir storage on the last day of April was 2 percent above average and 13 percent above last year. Combined Camas reservoir storage was 21 percent above average and 81 percent above last year; the combined Mission Valley reservoir storage was 1 percent below average and 65 percent above last year; Hungry Horse storage was 12 percent below average and 11 percent below last year; and Flathead Lake storage was 31 percent above average and 77 percent above last year.

Streamflows, for the period May through July, are forecast to be 21 percent above average and 52 percent above last years forecasts.

The North Fork Flathead near Columbia Falls is forecast to reach peak flows between May 27 and June 5 and daily peak flows ranging from 21,750 cfs to 29,250 cfs or 6 percent above average to 43 percent above average; the Middle Fork Flathead near West Glacier is forecast to reach peak flows between May 26 and June 3 and daily peak flows ranging from 20,250 cfs to 26,250 cfs or 8 percent below average to 19 percent above average; inflow to Hungry Horse Reservoir is forecast to reach peak flows between May 28 and June 6 and daily peak flows ranging from 4,600 to 6,700; and the Swan near Big Fork is forecast to reach peak flows between May 31 and June 10 and daily peak flows ranging from 4,600 cfs to 6,700 cfs or 12 percent below average to 28 percent above average.

Surface Water Supply Index (SWSI) was +1.8 for the North Fork Flathead River; +1.7 for the Middle Fork Flathead River; +1.2 for the South Fork Flathead River; +1.5 for the Flathead River at Columbia Falls; +1.9 for the Stillwater/Whitefish Rivers; +1.1 for the Swan River; +1.8 for the Flathead River at Polson; +1.4 for the Mission Valley; and +0.9 for the Little Bitterroot River.

Streamflow Forecasts

	<--- Drier ---	Future Conditions	--- Wetter --->		
Forecast Pt	Chance of Exceeding *				
Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
NF FLATHEAD nr Columbia Falls							
MAY-JUL	1677	1750	1800	122	1850	1923	1474
MAY-SEP	1897	1982	2040	124	2098	2183	1648
MF FLATHEAD nr West Glacier							
MAY-JUL	1672	1766	1830	126	1894	1988	1454
MAY-SEP	1836	1946	2020	126	2094	2204	1604

Streamflow Forecasts (continued)

Forecast Pt Forecast Period	<-- Drier -- Future Conditions -- Wetter --> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
HUNGRY HORSE Reservoir Inflow (1,2)							
MAY-JUL	2013	2121	2170	122	2219	2327	1777
MAY-SEP	2176	2296	2350	123	2404	2524	1911
FLATHEAD at Columbia Falls (2)							
MAY-JUL	5318	5629	5840	121	6051	6362	4816
MAY-SEP	5868	6226	6470	122	6714	7072	5294
STILLWATER nr Whitefish							
MAY-JUL	169	188	200	129	212	231	155
MAY-SEP	188	210	225	129	240	262	174
WHITEFISH nr Kalispell							
MAY-JUL	106	114	120	130	126	135	92
MAY-SEP	118	128	135	129	142	152	105
SWAN RIVER near Bigfork							
MAY-JUL	476	505	525	107	545	574	491
MAY-SEP	555	591	615	107	639	675	574
FLATHEAD Lake Inflow (1,2)							
MAY-JUL	5949	6459	6690	120	6921	7431	5578
MAY-SEP	6430	7070	7360	120	7650	8290	6114

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

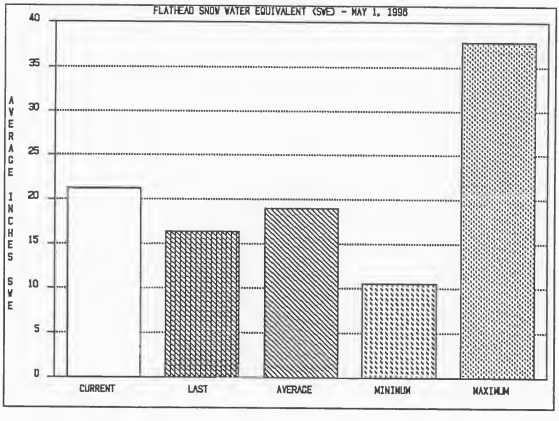
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
CAMAS (4)	45.2	34.4	19.0	28.5
MISSION VALLEY (8)	100.0	49.2	29.9	49.7
HUNGRY HORSE	3451.0	1803.0	2017.0	2043.0
FLATHEAD LAKE	1791.0	1224.0	690.7	937.2

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
NORTH FORK in CANADA	5	106	107
NORTH FORK in MONTANA	8	124	120
MIDDLE FORK	5	131	109
SOUTH FORK	7	132	108
STILLWATER-WHITEFISH	10	122	112
SWAN	8	122	110
MISSION VALLEY	5	107	113
LITTLE BITTERROOT-ASHLEY	6	150	78
JOCKO	5	155	117
FLATHEAD in MONTANA	39	130	112
FLATHEAD RIVER BASIN	44	127	112



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1992.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1972.

UPPER CLARK FORK RIVER BASIN as of May 1, 1996

Snowpack conditions in the Upper Clark Fork River Basin were above average. Snow water content was 10 percent above average; 23 percent above last year; and increased 4 percent during April.

Mountain precipitation during April was 28 percent above average and 10 percent above last year. Valley precipitation during April was 81 percent above average and 82 percent above last year. Water year precipitation, beginning October 1, 1995, was 28 percent above average and 34 percent above last year.

Reservoir storage on the last day of April was 18 percent above average and 11 percent above last year. Georgetown Lake storage was 14 percent above average and 3 percent above last year; Lower Willow Creek storage was 36 percent above average and 4 percent below last year; and Nevada Creek storage was 21 percent above average and 46 percent above last year.

Streamflows, for the period May through July, are forecast to be 6 percent above average and 46 percent above last years forecasts.
The Blackfoot near Bonner is forecast to reach peak flows between June 1 and June 8 and daily peak flows ranging from 8,100 cfs to 11,500 cfs or 11 percent below average to 27 percent above average; the Clark Fork above Missoula is forecast to reach peak flows between June 6 and June 9 and daily peak flows ranging from 14,500 cfs to 21,000 cfs or 8 percent below average to 34 percent above average; inflow into Lower Willow Creek Reservoir is forecast to reach peak flows the third or fourth week in May; Nevada Creek near Finn is forecast to reach peak flows during the last week in May to the first week of June and daily peak flow ranging from 220 cfs to 420 cfs or 34 percent below average to 26 percent above average; and Middle Fork Rock Creek near Phillipsburg is forecast to reach peak flows during the middle of June and daily peak flow ranging from 820 cfs to 1,240 cfs or 4 percent below average to 45 percent above average.

Surface Water Supply Index (SWSI) was +1.4 for the Clark Fork River above Rock Creek; +1.7 for the Blackfoot River; and +1.6 for the Clark Fork River above Missoula.

Streamflow Forecasts

	<--- Drier ---	Future Conditions	--- Wetter --->			
Forecast Pt	Chance of Exceeding *					
Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
WARM SPRINGS CK at Anaconda (2)							
MAY-JUL	28	34	38	106	42	48	36
MAY-SEP	35	42	46	105	50	57	44
LITTLE BLACKFOOT nr Garrison							
MAY-JUL	35	59	75	109	91	115	69
MAY-SEP	40	66	83	109	100	126	76
FLINT CK nr Southern Cross (2)							
MAY-JUL	8.5	11.5	13.5	112	15.5	18.5	12.1
MAY-SEP	10.3	14.0	16.5	112	19.0	23	14.7

Streamflow Forecasts (continued)

Forecast Pt / Forecast Period	<== Drier == 90% (1000AF)	70% (1000AF)	Future Conditions — Chance of Exceeding * — 50% (Most Prob) (1000AF)	(% AVG.)	== Wetter ==> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
FLINT CK bl Boulder Ck							
MAY-JUL	34	44	51	102	58	68	50
MAY-SEP	47	59	67	102	75	88	66
LOWER WILLOW CK RES Inflow							
MAY-JUL	8.0	10.6	12.4	109	14.2	16.8	11.4
MAY-SEP	8.8	11.5	13.4	109	15.3	18.0	12.3
MF ROCK CREEK nr Philipsburg							
MAY-JUL	59	68	74	119	80	89	62
MAY-SEP	66	75	82	119	89	99	69
ROCK CREEK near Clinton							
MAY-JUL	268	308	335	127	362	402	264
MAY-SEP	307	351	380	127	409	453	300
NEVADA CK nr Finn							
MAY-JUL	10.7	14.3	16.8	111	19.3	23	15.2
MAY-SEP	12.6	16.4	19.0	112	22	25	16.9
CLEARWATER nr Clearwater							
MAY-JUL	128	141	150	113	159	172	133
MAY-SEP	131	148	160	113	172	189	142
BLACKFOOT RIVER near Bonner							
MAY-JUL	705	765	805	113	845	905	714
MAY-SEP	802	866	910	113	954	1018	805
CLARK FORK ab Milltown							
MAY-JUL	443	554	630	115	706	817	549
MAY-SEP	526	647	730	112	813	934	652
CLARK FORK ab Missoula							
MAY-JUL	1111	1277	1390	110	1503	1669	1263
MAY-SEP	1343	1520	1640	113	1760	1937	1457

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

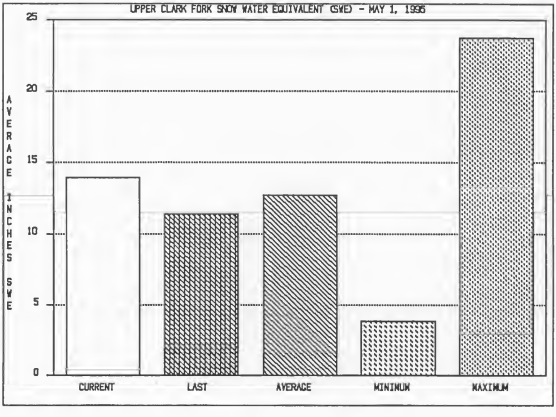
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********** This Year	Last Year	Average
GEORGETOWN LAKE	31.0	28.5	27.6	24.9
LOWER WILLOW CREEK	4.9	4.5	4.7	3.3
NEVADA CREEK	12.6	12.3	8.4	10.2

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
CLARK FORK ab FLINT CREEK	12	99	105
FLINT CREEK	6	105	109
ROCK CREEK	5	120	113
CLARK FORK ab BLACKFOOT	20	108	109
BLACKFOOT	15	162	112
UPPER CLARK FORK BASIN	33	124	110



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1977.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1972.

BITTERROOT RIVER BASIN as of May 1, 1996

Snowpack conditions in the Bitterroot River Basin were above average. Snow water content was 18 percent above average; 48 percent above last year; and increased 11 percent during April.

Mountain precipitation during April was 81 percent above average and 66 percent above last year. Valley precipitation during April was 143 percent above average and 121 percent above last year. Water year precipitation, beginning October 1, 1995, was 50 percent above average and 50 percent above last year.

Reservoir storage, on the last day of April, was 39 percent above average and 47 percent above last year. Painted Rocks Lake storage was 47 percent above average and 148 percent above last year and Como storage was 32 percent above average and 1 percent above last year.

Streamflows, for the period May through July, are forecast to be 25 percent above average and 60 percent above last years forecasts.

The Bitterroot near Darby is forecast to reach peak flows between June 4 to June 11 and daily peak flows ranging from 5,500 cfs to 8,000 cfs or 6 percent below average to 36 percent above average.

Surface Water Supply Index (SWSI) was +2.0 for the Bitterroot River.

Streamflow Forecasts

Forecast Pt / Forecast Period	<-- Drier -- Future Conditions -- Wetter --> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	50% (Most Prob) (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
WF BITTERROOT nr Conner (2)							
MAY-JUL	141	158	170	127	182	199	134
MAY-SEP	154	173	185	125	197	216	148
BITTERROOT nr Darby							
MAY-JUL	450	503	540	124	577	630	435
MAY-SEP	515	569	605	125	641	695	484
ROCK CK nr Darby (2)							
MAY-JUL	62	68	72	104	76	82	69
MAY-SEP	66	72	76	104	80	87	73
SKALKAHO CK nr Hamilton							
MAY-JUL	44	49	52	121	55	60	43
MAY-SEP	51	56	60	120	64	69	50
BURNT FORK CK nr Stevensville (2)							
MAY-JUL	28	32	35	130	38	42	27
MAY-SEP	32	37	40	125	43	48	32

Streamflow Forecasts (continued)

Forecast Pt Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions 50% (Most Prob) (1000AF)	(% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
	Chance of Exceeding *						
BITTERROOT at Missoula							
MAY-JUL	1260	1373	1450	126	1527	1640	1149
MAY-SEP	1419	1539	1620	128	1701	1821	1266

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

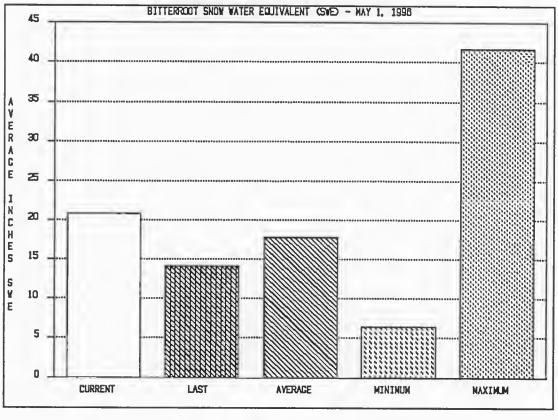
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
PAINTED ROCKS LAKE	31.7	29.3	11.8	20.0
COMO	34.9	26.6	26.3	20.2

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
WEST FORK BITTERROOT	3	146	133
EAST SIDE BITTERROOT	5	138	133
WEST SIDE BITTERROOT	3	152	102
BITTERROOT RIVER BASIN	10	148	118



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1987.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1972.

LOWER CLARK FORK RIVER BASIN as of May 1, 1996

Snowpack conditions in the Lower Clark Fork River Basin were near average. Snow water content was 1 percent above average; 32 percent above last year; and increased 11 percent during April.

Mountain precipitation during April was 67 percent above average and 117 percent above last year. Valley precipitation during April was 115 percent above average and 128 percent above last year. Water year precipitation, beginning October 1, 1995, was 47 percent above average and 48 percent above last year.

Noxon Rapids storage, on the last day of April, was 55 percent above average and 1 percent below last year.

Streamflows, for the period May through July, are forecast to be 13 percent above average and 14 percent above last year.

The Clark Fork below Missoula is forecast to reach peak flows between June 6 to June 13 and daily peak flows ranging from 29,500 cfs to 41,500 cfs or 3 percent below average to 37 percent above average and the Clark Fork at St. Regis is forecast to reach peak flows between June 6 and June 14 and daily peak flows ranging from 35,000 cfs to 50,000 cfs or 8 percent below average to 32 percent above average.
Surface Water Supply Index (SWSI) was +1.7 for the Clark Fork River below Bitterroot River and +1.8 for the Clark Fork River below Flathead River.

Streamflow Forecasts

	<== Drier ==	Future Conditions	== Wetter ==>			
Forecast Pt	Chance of Exceeding *					
Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
CLARK FORK ab Missoula							
MAY-JUL	1111	1277	1390	110	1503	1669	1263
MAY-SEP	1343	1520	1640	113	1760	1937	1457
CLARK FORK bl Missoula							
MAY-JUL	2399	2662	2840	118	3018	3281	2413
MAY-SEP	2792	3071	3260	120	3449	3728	2724
CLARK FORK at St. Regis (1)							
MAY-JUL	2807	3291	3510	111	3729	4213	3152
MAY-SEP	3278	3822	4070	114	4318	4862	3561
CLARK FORK nr Plains (1,2)							
MAY-JUL	8879	9925	10400	115	10875	11921	9052
MAY-SEP	10008	11172	11700	116	12228	13392	10080
THOMPSON RIVER nr Thompson Falls							
MAY-JUL	179	200	215	127	230	251	169
MAY-SEP	210	234	250	128	266	290	196
PROSPECT CREEK at Thompson Falls							
MAY-JUL	75	84	90	96	96	105	94
MAY-SEP	84	94	100	97	106	116	103

Streamflow Forecasts (continued)

Forecast Pt Forecast Period	<--- Drier --- 90% (1000AF)	70% (1000AF)	Future Conditions --- 50% (Most Prob) (1000AF)	(% AVG.)	--- Wetter ---> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
	Chance of Exceeding *						
CLARK FK at Whitehorse Rpds (1,2)							
MAY-JUL	9188	10434	11000	110	11566	12812	10020
MAY-SEP	10377	11768	12400	111	13032	14423	11200

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

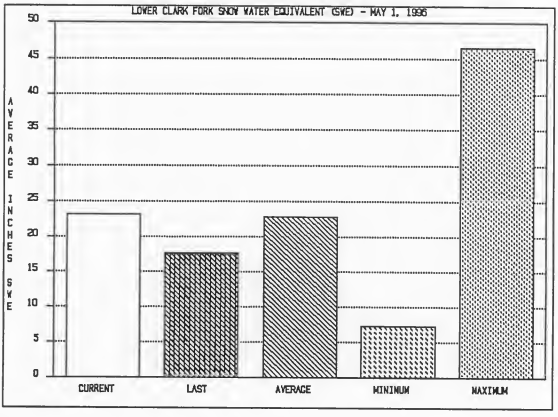
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********** This Year	Last Year	Average
NOXON RAPIDS	335.0	324.3	326.8	208.7

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
LOWER CLARK FORK	10	132	101



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1977.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1972.

JEFFERSON RIVER BASIN as of May 1, 1996

Snowpack conditions in the Jefferson River Basin were above average. Snow water content was 23 percent above average; 11 percent below last year; and increased 8 percent during April.

Mountain precipitation during April was 20 percent above average and 26 percent above last year. Valley precipitation during April was 35 percent above average and 77 percent above last year. Water year precipitation, beginning October 1, 1995, was 18 percent above average and 7 percent below last year.

Reservoir storage, on the last day of April, was 6 percent above average and 12 percent above last year. Lima storage was 36 percent above average and 40 percent above last year; Clark Canyon storage was 2 percent below average and 5 percent above last year; and Ruby River storage was 5 percent below average and the same as last year.

Streamflows, for the period May through July, are forecast to be 16 percent above average and 15 percent below last year.

The Big Hole near Melrose is forecast to reach peak flows from June 3 to June 12 with daily peak flows ranging from 7,200 cfs to 10,300 cfs or 2 percent below average to 40 percent above average; the Ruby River above Ruby Reservoir is forecast to reach peak flows between May 30 and June 7 with daily peak flows ranging from 700 cfs to 1,100 cfs or 29 percent below average to 11 percent above average; the Missouri at Toston is forecast to reach peak flows between June 8 and June 16 with daily peak flow ranging from 19,500 cfs to 27,500 cfs or 9 percent above average to 54 percent above average; and inflow into Clark Canyon Reservoir is forecast to reach peak flows between May 29 and June 2 with daily peak flows ranging from 1,150 cfs to 2,050 cfs.

Surface Water Supply Index (SWSI) was +1.8 for the Jefferson River; +1.8 for the Beaverhead River; +0.7 for the Ruby River; +2.2 for the Big Hole River; and +0.2 for the Boulder River.

Streamflow Forecasts

	<== Drier ==		Future Conditions		== Wetter ==>		
Forecast Pt	Chance of Exceeding *						
Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
RED ROCK RIVER near Monida (2)							
MAY-JUL	51	65	75	104	85	99	72
MAY-SEP	57	74	85	106	97	114	80
BEAVERHEAD RIVER near Grant (2)							
MAY-JUL	69	99	120	130	141	171	92
MAY-SEP	78	121	150	130	179	222	115
BEAVERHEAD RIVER at Barretts (2)							
MAY-JUL	106	132	150	121	168	194	124
MAY-SEP	140	170	190	123	210	240	155
RUBY RIVER near Alder							
MAY-JUL	46	60	70	96	80	94	73
MAY-SEP	56	73	85	96	97	114	89

Streamflow Forecasts (continued)

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
BIG HOLE RIVER near Melrose							
MAY-JUL	509	605	670	121	735	831	555
MAY-SEP	568	670	740	121	810	912	612
BOULDER RIVER near Boulder							
MAY-JUL	56	70	80	107	90	104	75
MAY-SEP	60	75	86	106	97	113	81
WILLOW CREEK near Harrison							
MAY-JUL	8.3	13.2	16.5	109	19.8	25	15.1
MAY-SEP	8.6	14.8	19.0	109	23	29	17.4
JEFFERSON RIVER near Three Forks (2)							
MAY-JUL	562	739	860	115	981	1158	749
MAY-SEP	628	823	955	114	1087	1282	841

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

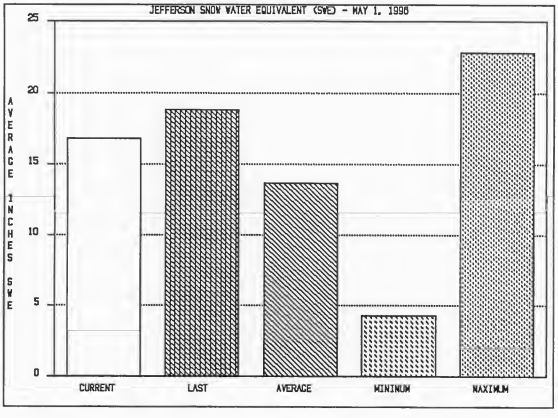
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********** This Year	Last Year	Average
LIMA	84.0	74.9	53.6	55.1
CLARK CANYON	255.6	159.0	151.5	162.4
RUBY RIVER	38.8	34.4	34.4	36.3

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
BEAVERHEAD	14	79	121
RUBY	9	80	118
BIGHOLE	14	110	134
BOULDER	7	79	106
JEFFERSON RIVER BASIN	37	89	123



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1977.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1975.

MADISON RIVER BASIN as of May 1, 1996

Snowpack conditions in the Madison River Basin were above average. Snow water content was 27 percent above average; 11 percent below last year; and increased 14 percent during April.

Mountain precipitation during April was 24 percent above average and 18 percent below last year. Valley precipitation during April was 2 percent below average and 48 percent below last year. Water year precipitation, beginning October 1, 1995, was 14 percent above average and 15 percent below last year.

Reservoir storage, on the last day of April, was 7 percent above average and 18 percent above last year. Ennis Lake storage was 17 percent below average and 15 percent below last year and Hebgen Lake storage was 10 percent above average and 24 percent above last year.

Streamflows, for the period May through July, are forecast to be 17 percent above average and 13 percent below last year.

Inflow into Hebgen Reservoir is forecast to reach peak flows the first week in June with daily peak flows ranging from 3,450 cfs to 4,350 cfs or near average to 26 percent above average.

Surface Water Supply Index (SWSI) was +1.7 for the Madison River.

Streamflow Forecasts

	<--- Drier ---	Future Conditions	--- Wetter --->			
Forecast Pt	Chance of Exceeding *					
Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
MADISON RIVER near Grayling (2)							
MAY-JUL	318	346	365	114	384	412	321
MADISON RIVER near Grayling (2)							
MAY-SEP	427	462	485	113	508	543	428
MADISON RIVER near McAllister (2)							
MAY-JUL	577	629	665	118	701	753	562
MAY-SEP	763	824	865	118	906	967	731

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

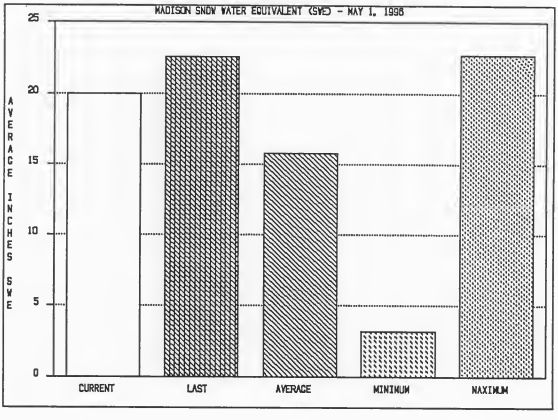
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
ENNIS LAKE	41.0	29.2	34.3	35.1
HEBGEN LAKE	377.5	271.5	219.8	246.1

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
MADISON above HEBGEN LAKE	6	91	139
MADISON below HEBGEN LAKE	11	87	119
MADISON RIVER BASIN	17	89	127



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1977.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1971.

GALLATIN RIVER BASIN as of May 1, 1996

Snowpack conditions in the Gallatin River Basin were above average. Snow water content was 12 percent above average; 4 percent below last year; and increased 7 percent during April.
Mountain precipitation during April was 14 percent above average and 26 percent below last year. Valley precipitation during April was 16 percent below average and 51 percent below last year. Water year precipitation, beginning October 1, 1995, was 15 percent above average and 2 percent below last year.

Middle Creek storage, on the last day of April, was 19 percent above average and 2 percent above last year.

Streamflows, for the period May through July, are forecast to be 11 percent above average and 5 percent below last year.

The Gallatin River near Gateway is forecast to reach peak flows between June 9 and June 18 with daily peak flows ranging from 5,100 cfs to 6,400 cfs or 2 percent below average to 23 percent above average and the Gallatin River near Logan is forecast to reach peak flows between June 10 and June 19 with daily peak flows ranging from 4,900 cfs to 6,800 cfs or 8 percent below average to 28 percent above average.

Surface Water Supply Index (SWSI) was +1.1 for the Gallatin River.

Streamflow Forecasts

	<== Drier ==	Future Conditions	== Wetter ==>			
Forecast Pt	Chance of Exceeding *					
Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
GALLATIN RIVER near Gateway							
MAY-JUL	404	440	465	114	490	526	409
MAY-SEP	484	523	550	113	577	616	486
E & W FK HYALITE CREEK near Bozeman							
MAY-JUL	16.7	18.7	20	95	21	23	21
MAY-SEP	21	23	24	96	25	28	25
HYALITE CREEK near Bozeman (2)							
MAY-JUL	27	31	33	100	36	39	33
MAY-SEP	32	36	39	100	42	46	39
GALLATIN RIVER at Logan (2)							
MAY-JUL	350	422	470	110	518	590	429
MAY-SEP	434	509	560	109	611	686	512

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

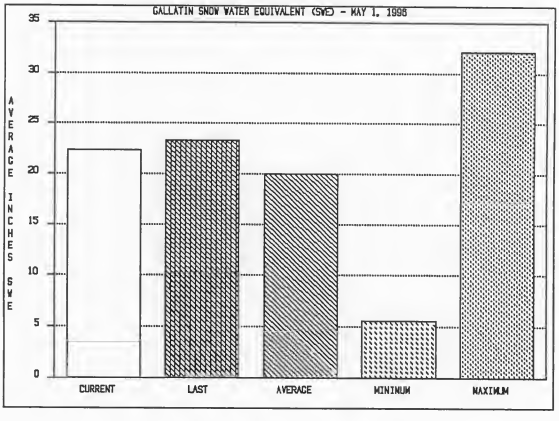
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
MIDDLE CREEK	10.2	5.7	5.6	4.8

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
UPPER GALLATIN	7	100	122
HYALITE	3	99	111
BRIDGER	3	82	88
GALLATIN RIVER BASIN	13	96	112



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1987.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1970.

MISSOURI MAINSTEM RIVER BASIN as of May 1, 1996

Snowpack conditions in the Mainstem Missouri River Basin were near average. Snow water content was 3 percent below average; 9 percent above last year; and percent of average remained the same as on April 1.

Mountain precipitation during April was 1 percent below average and 31 percent below last year. Valley precipitation during April was 23 percent below average and 34 percent below last year. Water year precipitation, beginning October 1, 1995, was 3 percent above average and 5 percent above last year.

Reservoir storage, on the last day of April, was 4 percent below average and 4 percent below last year. Canyon Ferry Lake storage was 4 percent below average and 4 percent below last year; Helena Valley storage was 29 percent above average and 21 percent above last year; Lake Helena storage was 32 percent below average and 38 percent below last year; Hauser & Helena storage was 15 percent below average and 19 percent below last year; Holter Lake storage was 9 percent above average and 1 percent below last year; and Fort Peck Lake storage was 14 percent above average and 16 percent above last year.

Streamflows, for the period May through July, are forecast to be 26 percent above average and 2 percent above last year.

Surface Water Supply Index (SWSI) was +1.6 for the Missouri River above Canyon Ferry; +1.0 for the Missouri River below Canyon Ferry; +1.7 for the Missouri River above Ft. Peck; and +1.7 for the Missouri River below Ft. Peck.

Streamflow Forecasts

Forecast Pt / Forecast Period	<== Drier == 90% (1000AF)	70% (1000AF)	Future Conditions — Chance of Exceeding * — 50% (Most Prob) (1000AF)	(% AVG.)	== Wetter ==> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
MISSOURI RIVER at Toston (2)							
MAY-JUL	1609	1832	2110	122	2388	2491	1730
MAY-SEP	1926	2141	2450	118	2759	2982	2071
PRICKLY PEAR CREEK near Clancy							
MAY-JUL	7.4	14.9	20	100	25	33	20
MAY-SEP	9.6	18.2	24	100	30	38	24
SUN RIVER at Gibson Dam (2)							
MAY-JUL	397	458	500	113	542	603	441
MAY-SEP	440	505	550	113	595	660	489
MISSOURI RIVER at Fort Benton (2)							
MAY-JUL	2337	2751	3230	124	3709	3896	2597
MAY-SEP	2869	3301	3820	120	4339	4782	3188
MARIAS RIVER near Shelby (2)							
MAY-JUL	350	416	460	119	504	570	387
MAY-SEP	386	451	495	116	539	604	428

Streamflow Forecasts (continued)

Forecast Pt Forecast Period	<== Drier == 90% (1000AF)	70% (1000AF)	Future Conditions 50% (Most Prob) (1000AF)	(% AVG.)	== Wetter ==> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
			Chance of Exceeding *				
MISSOURI RIVER at Virgelle (2)							
MAY-JUL	2666	3245	3770	124	4295	4666	3030
MAY-SEP	3214	3798	4390	120	4982	5624	3652
MISSOURI RIVER near Landusky (2)							
MAY-JUL	2951	3666	4200	128	4734	5214	3279
MAY-SEP	3566	4301	4880	123	5459	6300	3962
MISSOURI RIVER below Fort Peck (2)							
MAY-JUL	2894	3622	4242	123	4862	5356	3449
MAY-SEP	3289	4137	4810	123	5483	6087	3908
LAKE SAKAKAWEA Inflow (2)							
MAY-JUL	8291	9299	10600	129	11901	12888	8209
MAY-SEP	9755	11044	12400	128	13756	15163	9658

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

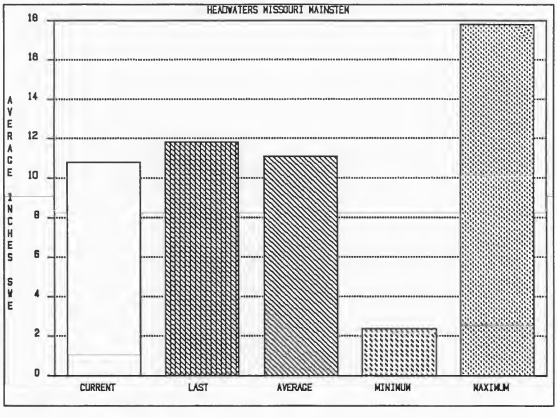
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********** This Year	Last Year	Average
CANYON FERRY LAKE	2043.0	1439.0	1500.0	1501.0
HELENA VALLEY	9.2	9.7	8.0	7.5
LAKE HELENA	10.4	6.9	11.1	10.1
HAUSER & HELENA	61.9	51.5	63.2	60.4
HOLTER LAKE	81.9	80.6	81.3	73.9
FORT PECK LAKE (MAF)	18.9	17.1	14.7	15.0

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
HEADWATERS MAINSTEM	9	92	98
SUN-TETON-MARIAS BASINS	14	147	102
SMITH-JUDITH-MUSSELSHELL	12	83	94
MAINSTEM ab FORT PECK RES	34	109	98
MILK	5	85	48
MISSOURI MAINSTEM BASIN	39	109	97



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1987.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1975.

SMITH-JUDITH-MUSSELSHELL RIVER BASINS as of May 1, 1996

Snowpack conditions in the Smith-Judith-Musselshell River Basins were slightly below average. Snow water content was 6 percent below average; 17 percent below last year; and the same percent as April 1.

Mountain and valley precipitation during April was 6 percent below average and 36 percent below last year and water year precipitation, beginning October 1, 1995, was 12 percent above average and 5 percent above last year. Mountain and valley precipitation in the Smith River during April was 2 percent above average and 33 percent below last year and water year precipitation was 18 percent above average and 16 percent above last year; Mountain and valley precipitation in the Judith River during April was 16 percent below average and 62 percent below last year and water year precipitation was 1 percent above average and 8 percent below last year; and Mountain and valley precipitation in the Musselshell River during April was 3 percent below average and 33 percent below last year and water year precipitation was 15 percent above average and 1 percent above last year. Reservoir storage, on the last day of April, was 28 percent above average and 20 percent above last year. Smith River storage was 12 percent above average and 22 percent above last year; Newlan storage was 20 percent above average and 4 percent above last year; Bair storage was 14 percent below average and 9 percent above last year; Martinsdale storage was 68 percent above average and 126 percent above last year; and Deadman's Basin was 26 percent above average and 7 percent below last year.

Streamflows, for the period May through July, are forecast to be 2 percent below average and 1 percent above last year.

The Smith near Fort Logan is forecast to reach peak flows between June 9 and June 18 with peak daily flows ranging from 650 cfs to 950 cfs; Sheep Creek near White Sulphur Springs is forecast to reach peak flows the last week in May with daily peak flows ranging from 200 cfs to 300 cfs or 6 percent below average to 42 percent above average.

Surface Water Supply Index (SWSI) was +0.7 for the Smith River and +0.4 for the Musselshell River.

Streamflow Forecasts

	<=== Drier ===	Future Conditions	=== Wetter ===>		
Forecast Pt	========== Chance of Exceeding * ==========				
Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
SMITH RIVER near Fort Logan						
MAY-JUL	34	47	56 106	65	78	53
MAY-SEP	46	59	68 106	77	90	64
SHEEP CREEK nr White Sulphur Springs						
MAY-JUL	15.6	17.6	19.0 117	20	22	16.3
MAY-SEP	18.3	21	22 115	24	26	19.2
NF MUSSELSHELL near Delpine						
MAY-JUL	1.68	2.61	3.25 86	3.89	4.82	3.80
MAY-SEP	2.05	3.15	3.90 85	4.65	5.75	4.60

Streamflow Forecasts (continued)

Forecast Pt Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions Chance of Exceeding * 50% (Most Prob) (1000AF)	50% (% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
SF MUSSELSHELL abv Martinsdale							
MAY-JUL	11.2	27	38	83	49	65	46
MAY-SEP	13.9	31	42	84	53	70	50

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

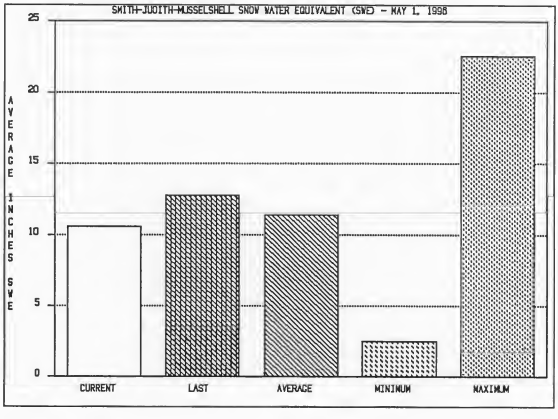
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
SMITH RIVER	10.6	10.2	7.2	9.1
NEWLAN CREEK	12.4	10.6	10.2	8.8
BAIR	7.0	5.0	4.6	5.8
MARTINSDALE	23.1	20.8	9.2	12.4
DEADMAN'S BASIN	72.2	68.8	64.6	54.4

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SMITH	6	103	108
JUDITH	6	76	87
MUSSELSHELL	5	84	90
SMITH-JUDITH-MUSSELSHELL	12	83	94



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1987.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1970.

SUN-TETON-MARIAS RIVER BASINS as of May 1, 1996

Snowpack conditions in the Sun-Teton-Marias River Basins were slightly above average. Snow water content was 2 percent above average; 47 percent above last year; and increased 1 percent during April.

Mountain and valley precipitation during April was 2 percent below average and 4 percent below last year. Water year precipitation, beginning October 1, 1995, was 26 percent above average and 37 percent above last year. Mountain and valley precipitation in the Sun River during April was 34 percent above average and 2 percent below last year and water year precipitation was 33 percent above average and 34 percent above last year; Mountain and valley precipitation in the Teton River during April was 8 percent below average and 2 percent above last year and water year precipitation was 38 percent above average and 56 percent above last year; and Mountain and valley precipitation in the Marias River during April was 8 percent below average and 8 percent below last year and water year precipitation was 21 percent above average and 31 percent above last year.

Reservoir storage, on the last day of April, was 34 percent above average and 24 percent above last year. Gibson storage was 8 percent above average and 181 percent above last year; Pishkun storage was 44 percent above average and 20 percent above last year; Willow Creek storage was 15 percent above average and 23 percent above last year; Lower Two Medicine Lake storage was 39 percent above average and 1 percent below last year; Four Horns Lake storage was 15 percent below average and 10 percent below last year; Swift storage was 38 percent above average and 25 percent above last year; Lake Frances storage was 23 percent above average and 71 percent above last year; and Lake Elwell (Tiber) storage was 39 percent above average and 16 percent above last year.

Streamflows, for the period May through July, are forecast to be 17 percent above average and 60 percent above last year.

Inflow into Gibson Reservoir is forecast to reach peak flows between May 31 and June 7 with daily peak flows ranging from 7,200 cfs to 8,900 cfs; Inflow into Swift Reservoir is forecast to reach peak flows the first week in June.

Surface Water Supply Index (SWSI) was +1.4 for the Sun River; +1.9 for the Teton River; +1.5 for the Marias River; and +1.9 for Birch/Dupuyer Creeks.

Streamflow Forecasts

	<=== Drier ===	Future	Conditions	=== Wetter ===>		
Forecast Pt	Chance of Exceeding *					
Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
SUN RIVER at Gibson Dam (2)							
MAY-JUL	397	458	500	113	542	603	441
MAY-SEP	440	505	550	113	595	660	489
TWO MEDICINE RIVER near Browning (2)							
MAY-JUL	158	195	220	118	245	282	187
MAY-SEP	173	210	235	118	260	297	200
BADGER CREEK near Browning (2)							
MAY-JUL	93	108	118	127	128	144	93
MAY-SEP	113	129	140	127	151	167	110

Streamflow Forecasts (continued)

Forecast Pt Forecast Period	<--- Drier --- 90% (1000AF)	70% (1000AF)	Future Conditions 50% (Most Prob) (1000AF)	(% AVG.)	--- Wetter ---> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
	Chance of Exceeding *						
SWIFT RESERVOIR Inflow near Dupuyer							
MAY-JUL	50	62	70	115	78	90	61
MAY-SEP	63	76	84	115	92	105	73
DUPUYER CREEK near Valier							
MAY-JUL	2.3	9.9	15.0	115	20	28	13.1
MAY-SEP	3.8	11.7	17.0	113	22	30	15.0
CUT BANK CREEK at Cut Bank							
MAY-JUL	74	84	90	120	96	106	75
MAY-SEP	83	93	100	119	107	117	84
MARIAS RIVER near Shelby (2)							
MAY-JUL	350	416	460	119	504	570	387
MAY-SEP	386	451	495	116	539	604	428

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

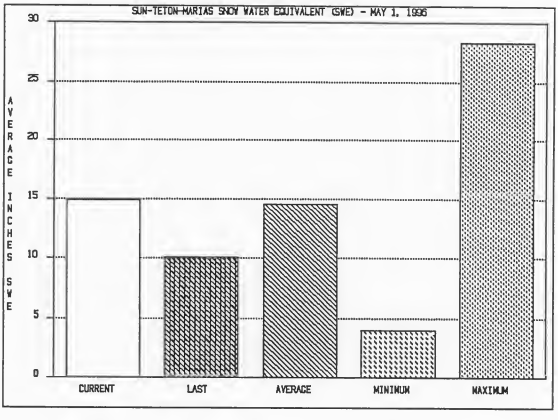
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
GIBSON	99.1	61.9	22.0	57.2
PISHKUN	32.0	36.6	30.6	25.4
WILLOW CREEK	32.2	28.3	23.0	24.6
LOWER TWO MEDICINE LAKE	11.9	12.4	12.5	8.9
FOUR HORNS LAKE	19.2	10.9	12.1	12.8
SWIFT	30.0	25.3	20.2	18.3
LAKE FRANCES	112.0	95.8	55.9	77.6
LAKE ELWELL (TIBER)	1347.0	850.2	730.5	611.4

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SUN	7	167	103
TETON	4	146	110
MARIAS	6	135	100
SUN-TETON-MARIAS BASINS	14	147	102



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1964-1995, OCCURRED IN WATER YEAR 1977.

MAXIMUM SNOW WATER EQUIVALENT, 1964-1995, OCCURRED IN WATER YEAR 1972.

ST. MARY and MILK RIVER BASINS as of May 1, 1996

Snowpack conditions in the St. Mary and Milk River Basins were below average. Snow water content in the St. Mary River Basin was 13 percent below average and 13 percent above last year. In the Bearpaw Mountains the snow water content was 52 percent below average and 15 percent below last year.

Mountain and valley precipitation during April was at average and 2 percent below last year and water year precipitation, beginning October 1, 1995, was 36 percent above average and 37 percent above last year. Mountain and valley precipitation in the St. Mary River during April was 17 percent above average and 41 percent above last year and water year precipitation, beginning October 1, 1995, was 41 percent above average and 44 percent above last year. Mountain and valley precipitation in the Milk River during April was 18 percent below average and 32 percent below last year. Water year precipitation, beginning October 1, 1995, was 27 percent above average and 23 percent above last year.

Reservoir storage, on the last day of April, was 19 percent above average and 40 percent above last year. Lake Sherburne storage was 86 percent above average and 88 percent above last year; Fresno storage was 6 percent above average and 29 percent above last year; Beaver Creek storage was 48 percent above average and 28 percent above last year; and Nelson storage was 14 percent above average and 39 percent above last year.

Streamflows in the St. Mary, for the period May through July, are forecast to be 9 percent above average and 32 percent above last year. Streamflows in the Milk, for the period May through July, are forecast to be 3 percent above average and 60 percent above last year.

Surface Water Supply Index (SWSI) was +0.3 for the Milk River.

Streamflow Forecasts

	<== Drier ==	Future Conditions	== Wetter ==>		
Forecast Pt	Chance of Exceeding *				
Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
SWIFTCURRENT CREEK at Sherburne (2)							
MAY-JUL	90	96	100	102	104	110	98
MAY-SEP	104	112	117	102	122	130	115
ST. MARY RIVER near Babb							
MAY-JUL	379	398	410	111	422	441	371
MAY-SEP	434	461	480	109	499	526	439
ST. MARY RIVER at US/CAN Border (2)							
MAY-JUL	426	452	470	110	488	514	429
MAY-SEP	487	525	550	109	575	613	506
MILK RIVER at Western Crossing							
MAY-JUL	18.5	25	29	116	33	40	25
MAY-SEP	21	27	31	115	35	41	27
MILK RIVER at Eastern Crossing (2)							
MAY-JUL	14.3	27	35	97	43	56	36
MAY-SEP	27	37	44	98	51	61	45

Streamflow Forecasts (continued)

Forecast Pt / Forecast Period	<--- Drier --- Future Conditions --- Wetter ---> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
BEAVER CREEK near Havre							
MAY-JUL	1.05	4.47	6.80	87	9.13	12.55	7.80

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

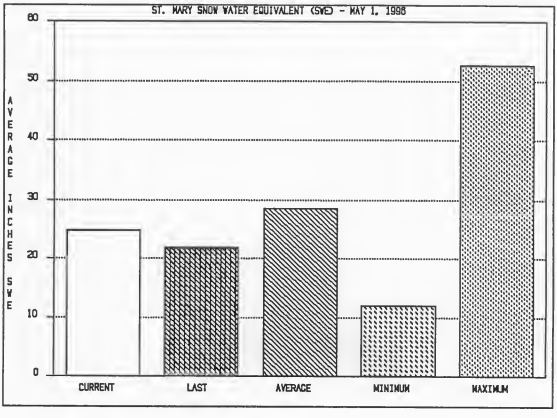
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
LAKE SHERBURNE	64.3	38.7	20.6	20.8
FRESNO	127.0	101.5	78.6	95.8
BEAVER CREEK	3.5	3.7	2.9	2.5
NELSON	66.8	48.7	35.0	42.7

Watershed Snowpack Analysis

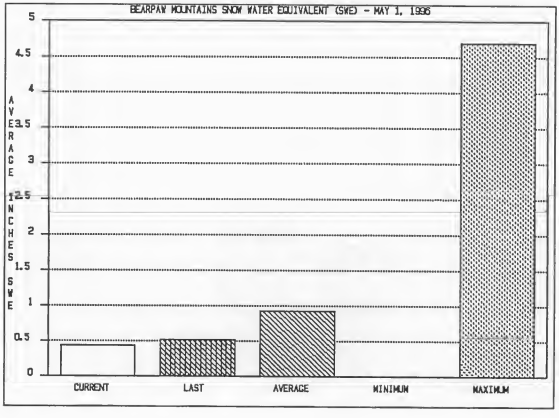
Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
ST. MARY RIVER BASIN	8	113	87
BEARPAW MOUNTAINS	5	85	48
CYPRESS HILLS, CANADA	0	0	0
MILK RIVER BASIN	5	85	48
ST. MARY and MILK BASINS	13	112	86



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1977.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1972.



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1973-1995, AND HAS OCCURRED IN SEVERAL WATER YEARS.

MAXIMUM SNOW WATER EQUIVALENT, 1973-1995, WAS 4.7 INCHES AND OCCURRED IN WATER YEAR 1975.

UPPER YELLOWSTONE RIVER BASIN as of May 1, 1996

Snowpack conditions in the Upper Yellowstone River Basin were well above average. Snow water content was 36 percent above average; 15 percent above last year; and increased 11 percent during April.

Mountain precipitation during April was 11 percent above average and 25 percent below last year. Valley precipitation during April was 34 percent below average and 55 percent below last year. Water year precipitation, beginning October 1, 1995, was 28 percent above average and 10 percent above last year.

Reservoir storage, on the last day of April, was at average and 13 percent below last year. Mystic Lake storage was 84 percent below average and 62 percent below last year and Cooney storage was 9 percent above average and 11 percent below last year.

Streamflows, for the period May through July, are forecast to be 25 percent above average and 18 percent above last year.

The Yellowstone River at Corwin Springs is forecast to reach peak flows between June 15 and June 20 with daily peak flows ranging from 18,000 cfs to 24,000 cfs or 7 percent above average to 42 percent above average; the Yellowstone at Livingston is forecast to reach peak flows between June 15 and June 20 with daily peak flows ranging from 20,500 cfs to 27,000 cfs or 3 percent above average to 36 above average; the Boulder near Big Timber is forecast to reach peak flows between June 15 and June 20 with daily peak flows ranging from 4,150 cfs to 6,100 cfs or 18 percent below average to 21 percent above average; the Stillwater near Absarokee is forecast to reach peak flows between June 15 and June 19 with daily peak flows ranging from 6,500 cfs to 9,400 cfs or 3 percent above average to 49 percent above average; the Clarks Fork near Belfry is forecast to reach peak flows between June 15 and June 20 with daily peak flows ranging from 8,400 cfs to 11,300 cfs or 12 to 51 percent above average; the Yellowstone at Billings is forecast to reach peak flows between June 16 and June 21 with daily peak flows ranging from 45,500 cfs to 60,500 cfs or 11 percent above average to 48 percent above average.

Surface Water Supply Index (SWSI) was +2.1 for the Yellowstone River above Bighorn River; +3.0 for the Yellowstone River above Livingston; +1.0 for the Shields River; +2.0 for the Boulder River; +2.5 for the Stillwater River; +3.0 for the Rock/Red Lodge Creeks; and +3.2 for the Clarks Fork River.

Streamflow Forecasts

Forecast Pt / Forecast Period	<== Drier == 90% (1000AF)	70% (1000AF)	Future Conditions 50% (Most Prob) (1000AF)	(% AVG.)	== Wetter ==> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
	Chance of Exceeding *						
YELLOWSTONE at Lake Outlet							
MAY-JUL	547	596	630	117	664	713	538
MAY-SEP	778	839	880	116	921	982	756
YELLOWSTONE RIVER at Corwin Springs							
MAY-JUL	1691	1774	1830	121	1886	1969	1516
MAY-SEP	2053	2155	2225	121	2295	2397	1844

Streamflow Forecasts (continued)

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
YELLOWSTONE RIVER near Livingston							
MAY-JUL	1929	2040	2115	122	2190	2301	1737
MAY-SEP	2351	2487	2580	122	2673	2809	2123
SHIELDS RIVER near Livingston							
MAY-JUL	101	127	145	108	163	189	134
MAY-SEP	119	146	165	109	184	211	151
BOULDER RIVER at Big Timber							
MAY-JUL	254	287	310	96	333	366	322
MAY-SEP	276	311	335	96	359	394	350
WEST ROSEBUD CREEK near Roscoe (2)							
MAY-JUL	66	72	76	127	80	86	60
MAY-SEP	86	93	97	126	102	108	77
STILLWATER RIVER nr Absarokee (2)							
MAY-JUL	490	553	595	126	637	700	474
MAY-SEP	612	673	715	126	757	818	569
CLARKS FORK RIVER near Belfry							
MAY-JUL	616	660	690	136	720	764	508
MAY-SEP	692	739	770	136	801	848	566
RED LODGE CREEK blw Cooney Res (2)							
MAY-JUL	30	44	53	140	62	76	38
MAY-SEP	46	59	68	139	77	90	49
YELLOWSTONE RIVER at Billings (2)							
MAY-JUL	3918	4087	4390	132	4693	4781	3320
MAY-SEP	4666	4852	5180	131	5508	5694	3954

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

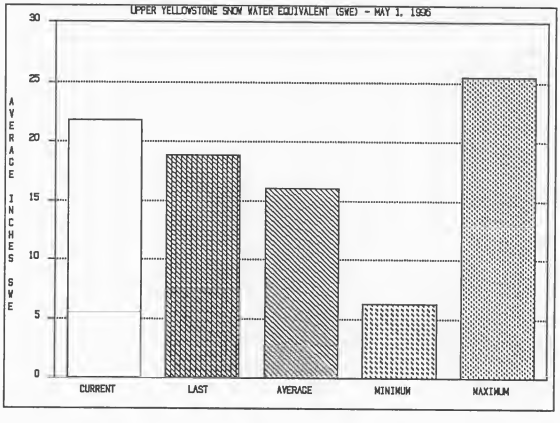
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
MYSTIC LAKE	21.0	0.3	0.8	1.9
COONEY	27.4	21.1	23.8	19.4

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
YELLOWSTONE ab LIVINGSTON	15	123	146
SHIELDS	5	83	101
BOULDER-STILLWATER	4	133	141
CLARK'S FORK-ROCK CREEK	13	119	135
UPPER YELLOWSTONE BASIN	33	115	136



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1987.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1971.

LOWER YELLOWSTONE RIVER BASIN as of May 1, 1996

Snowpack conditions in the Lower Yellowstone River Basin were well above average. Snow water content was 23 percent above average; 3 percent above last year; and increased 3 percent during April.

Mountain and valley precipitation during April was 10 percent above average and 20 percent below last year. Water year precipitation, beginning October 1, 1995, was 21 percent above average and 1 percent below last year.

Reservoir storage, on the last day of April, was 4 percent below average and 3 percent below last year. Bighorn Lake storage was 3 percent below average and 3 percent below last year and the Tongue River storage was 25 percent below average and 13 percent below last year.

Streamflows, for the period May through July, are forecast to be 30 percent above average and 16 percent above last year.

Surface Water Supply Index (SWSI) was +2.8 for the Yellowstone River below Bighorn River; +2.6 for the Bighorn River below Bighorn Lake; 0.0 for the Little Bighorn River; +1.0 for the Tongue River; and +0.9 for the Powder River.

Streamflow Forecasts

	<--- Drier ---	Future Conditions	--- Wetter --->			
Forecast Pt	Chance of Exceeding *					
Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
YELLOWSTONE RIVER at Billings (2)							
MAY-JUL	3918	4087	4390	132	4693	4781	3320
MAY-SEP	4666	4852	5180	131	5508	5694	3954
BIGHORN RIVER nr St. Xavier (2)							
MAY-JUL	1598	1882	2015	134	2148	2443	1508
MAY-SEP	1773	2087	2220	133	2353	2710	1673
LITTLE BIGHORN RIVER nr Hardin							
MAY-JUL	54	87	110	93	133	166	118
MAY-SEP	62	100	125	93	150	188	135
TONGUE RIVER stateline nr Decker (2)							
MAY-JUL	129	185	215	106	245	304	202
MAY-SEP	145	209	240	106	271	342	227
YELLOWSTONE RIVER at Miles City (2)							
MAY-JUL	5651	6091	6665	135	7239	7584	4957
MAY-SEP	6652	7129	7760	133	8391	8928	5835
POWDER RIVER at Moorhead							
MAY-JUL	126	155	175	96	195	224	182
MAY-SEP	150	180	200	98	220	250	204
POWDER RIVER near Locate							
MAY-JUL	127	171	200	95	229	273	211
MAY-SEP	133	191	230	98	269	327	234

Streamflow Forecasts

Forecast Pt / Forecast Period	<--- Drier --- Future Conditions --- Wetter ---> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
YELLOWSTONE RIVER nr Sidney (2)							
MAY-JUL	6029	6044	6895	128	7746	8451	5383
MAY-SEP	7020	6962	8000	128	9038	9841	6268

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

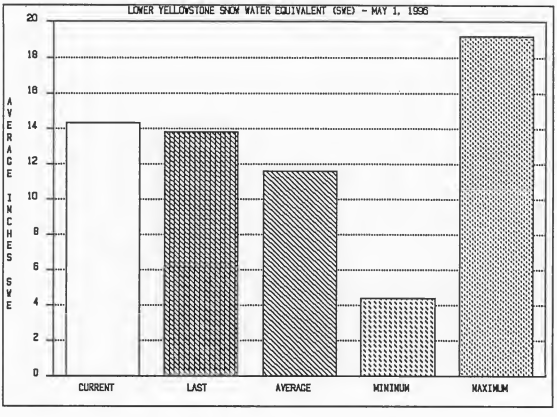
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Reservoir Storage (1000AF) End of April

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
BIGHORN LAKE	1356.0	767.1	790.0	789.2
TONGUE RIVER	68.0	27.4	31.4	36.6

Watershed Snowpack Analysis

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
WIND RIVER (Wyoming)	20	99	123
SHOSHONE RIVER (Wyoming)	6	120	155
BIGHORN RIVER (Wyoming)	20	108	133
LITTLE BIGHORN (WYOMING)	3	115	107
TONGUE RIVER (Wyoming)	9	108	111
POWDER RIVER (Wyoming)	8	99	118
LOWER YELLOWSTONE BASIN	47	104	123



AVERAGE IS FOR THE PERIOD 1961-1990.

MINIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1981.

MAXIMUM SNOW WATER EQUIVALENT, 1961-1995, OCCURRED IN WATER YEAR 1971.

Federal Building, Room 443
10 E. Babcock
Bozeman, MT 59715

Montana
Basin Outlook Report

Natural Resources Conservation Service
Bozeman, MT